



Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-2624



Title V Operating Permit

Permit No.: O-0072-18-V (R1)

Plant ID: 0072

Effective Date: 12/7/2018

Expiration Date: 12/31/2023

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source: Ford Motor Company – Louisville Assembly Plant
Owner: Ford Motor Company
2000 Fern Valley Road
Louisville, Kentucky 40213

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than six (6) months prior to the expiration date.

Permit Writer: Shannon Hosey

Administratively Complete: 05/08/2015

Date of Public Notice: 10/04/2018

Date of proposed permit: 10/04/2018

A handwritten signature in blue ink, appearing to read "Matt K.", with a stylized flourish at the end.

Air Pollution Control Officer
12/7/2018

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Title V Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	147-97-TV	01/31/00	11/21/1999	Initial	Entire Permit	Initial Permit Issuance
R1	147-97-TV (R1)	9/17/10	7/19/2010	Initial/Renewal	Entire Permit	5 year Renewal; Incorporate PAL, STAR TAC requirements, RO change, DRE for E-coat control device change and 112(J) Part 1 & 2 applications
R2	147-97-TV (R2)	3/31/11	NA	Admin Revision	Pages 43,45 and 50	Revision to include permit 229-96-O, add NOx RACT language and correct Methanol Tank Vapor Pressure
NA	O-0072-18-V	NA	07/14/2018	Renewal	Entire Permit	Renewal
R1	O-0072-18-V (R1)	12/07/18	10/04/2018	Renewal	Entire Permit	<ul style="list-style-type: none"> • Change to the PAL monitoring and recordkeeping section to require thermal oxidizer valve assessments to be conducted every 18 months instead of annually • Correction to the 40 CFR Subpart DDDDD tune-up requirement for Boiler E06 to be conducted biennially instead of annually

Application Documents

Document Number	Date Received	Description
00090845	2/16/2018	Company's Uncontrolled PTE
00090846	2/14/2018	Company's Updated Modeling
70631	4/13/2015	Permit renewal application
68427	12/16/2014	AP-100A Admin Change

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors</i> , published by U.S.EPA
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD or APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations."

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements that are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. [Regulation 2.16, sections 4.1.3, 4.1.13.1, and 4.1.13.7]
2. **Compliance Certification** - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

*US EPA - Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960*

*Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137*

This certification must be postmarked by 15 April of the year following the year for which the certification is being submitted, or other such due date as required by another applicable regulation.

3. **Compliance Schedule** - The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations if the conditions in Regulation 2.16 are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An emergency occurred and that the owner or operator can identify the cause of the emergency;
 - ii. The permitted facility was at the time being properly operated;
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, sections 4.7.1 through 4.7.4]

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 12.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, section 12.2.4]

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District-Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, sections 4.2.1 and 4.2.2]

9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.

[Regulation 2.16, sections 4.1.13.2 and 4.1.13.3]

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit.

[Regulation 2.16, section 4.1.13.6]

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35.b. [Regulation 2.07, section 10.2]

12. **Insignificant Activities** - The owner or operator shall:

- a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, section 5]

- b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. [Regulation 2.16, section 4.3.5.3.6]

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

[Regulation 2.16, section 4.3.2]

- a. Enter the premises to inspect any emissions-related activity or records required in this permit.

- b. Have access to and copy records required by this permit.

- c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.

- d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every three months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be 1 January through 31 March, 1 April through 30 June, 1 July through 30 September, and 1 October through 31 December of each calendar year. All reports shall

be sent to the District at the address shown in paragraph 2 of these General Conditions and must be postmarked by the 60th day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All quarterly compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company.

The quarterly compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 – March 30–	May 30
April 1 - June 30	August 29
July 1 – September 30	November 29
October 1 - December 31	March 1 of the following year

If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, section 5. [Regulation 2.16, section 4.1.5]
16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, section 4.1.16]
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Termination and Revocation by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:
 - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;
 - c. Knowingly making any false statement in any permit application;
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
31. **Risk Management Plan (112(r))** - For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to

other circumstances, as well as the remainder of this permit's conditions, shall not be affected. [Regulation 2.16, section 4.1.12]

33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.

34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

35. **Submittal of Reports, Data, Notifications, and Applications**

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

***Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, KY 40203-3137***

b. Documents that are specifically required to be submitted to EPA, as set forth in Regulation 2.16 sections 3.3 and 5.8.5 shall be mailed to EPA at:

***US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104***

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements

Regulation	Title
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

District Only Enforceable Regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.00	Definitions
5.01	General Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment that normally contains fifty (50) pounds of refrigerant or more must keep servicing records documenting the date

and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;

- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, section 4.1.5]

Plantwide STAR Requirements

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions	1 through 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 7
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.23	Categories of Toxic Air Contaminants	1 through 6

Plantwide Specific Conditions

S1. **Standards** (Regulation 2.16 Section 4.1.1)

a. **TAC**

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*. (Regulations 5.00 and 5.21)
- ii. The owner or operator shall submit a STAR EA demonstration with the application for construction for any new or modified emission unit. The STAR EA demonstration must demonstrate compliance for all Category 1 through Category 4 TACs emitted from that emission unit as well as compliance with all other STAR goals. (Regulation 5.21, section 4.22.1)
- iii. For any conditions outside the environmental acceptability analysis, including if a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis*, the owner or operator shall verify and document the environmental acceptability of the revised emissions at the time of the change. Prior approval by the District is not required for a change pursuant to Regulation 5.21, section 4.22.3 if the requirements of 4.23.1 through 4.23.4 are met. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21, Section 4)

- iv. If the TAC does not have an established BAC or *de minimis* value, the owner or operator shall calculate and report these values. The form located on the Attachment A, may be used for determining BAC and *de minimis* values. (Regulation 5.20, Section 3 and 4)

S2. Monitoring and Record Keeping (Regulation 2.16 Section 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to, (M)SDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis*, the owner or operator shall verify and document the environmental acceptability of the revised emissions, at the time of the change.

S3. Reporting (Regulation 2.16 Section 4.1.1)

The owner or operator shall report the following information, as required by General Condition 14:

a. The owner or operator shall report quarterly the following:

- i. Emission Unit and Emission Point identification and Control Device number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of the operating parameters being monitored;
- iv. Description of the corrective action taken for each exceedance.

b. **TAC**

- i. Any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration. This includes, but is not limited to, control device upset conditions.
- ii. The re-evaluated EA demonstration to the District within 6 months after a change of a raw material.

Comments for Plantwide STAR Requirements

- The facility submitted the TAC Environmental Acceptability (EA) Demonstration to the District in December 2016. Compliance with the STAR EA Goals was demonstrated in the source's EA Demonstrations. Based on AERMOD air modeling, the maximum off-site R_{NC} for all process/process equipment is less than 1.0. The source has demonstrated compliance with the EA Goals for each TAC. None of the listed TACs have a BAC_c .

TAC	BAC_{NC}	HQ
Toluene	5000	0.0352
Ethylene glycol monobutyl ether acetate (EGMbEA)	17600	0.0027
Xylene	100	0.289
Aluminum	50	0.623
1,2,4-trimethylbenzene	50	0.242

Plantwide Applicability Limit (PAL)

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
2.03	Permit Requirements Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	1, 2, 3, 4, & 5
2.05	Prevention of Significant Deterioration of Air Quality	1
40 CFR 52.21	Approval and Promulgation of Implementation Plans	(aa)(1) through (15)

Plantwide Applicability Limit (PAL) Specific Conditions

S1. **Standards¹** (Regulation 2.05, section 1 & Regulation 2.03)

- a. Under the provisions of the PAL 245-09-C (R1) effective 3/31/2011 and expires 7/30/2020, if the permittee adds a new emission unit or modifies an existing unit, the unit would not be subject to major NSR (non-attainment or PSD) as long as the PAL emission limits below (ton per year limits) are not exceeded.

Plantwide Applicability Limits²	
Pollutant	Tons/12-Month Rolling
VOC	1,316
PM	21.2
PM ₁₀	21.2
PM _{2.5}	17.2
NO _x	99.0
SO ₂	39.33
CO	151.4

b. **Operational and Equipment Modifications:**

- i. The owner or operator is authorized to perform the physical or operational changes, or changes deemed consistent with those physical or operational changes, without applying for or obtaining a construction permit or

¹ The PAL permit provisions (under Regulation 2.05) have been adopted by the Louisville Metro Air Pollution Control District (LMAPCD). “Baseline actual emissions” as of a particular date are generally defined as “rate of emissions, in tons per year, of a regulated NSR pollutant, that the unit actually emitted during any consecutive twenty-four (24) month period selected by the owner or operator within the ten (10) year period beginning on or after November 15, 1990, and immediately preceding the earlier of the date the owner or operator begins actual construction of the project or the date a complete permit application is received by the agency”.

² The Plantwide Applicability Limit(s) (PAL) are set at levels equal to the baseline determination submitted by Ford Motor Company February 2, 2009 and historical actual emission levels.

amendment from the District pursuant to Regulation 2.03 as long as the PAL is not exceeded.

- ii. The permittee shall maintain a log of equipment installed and/or modified and the date on which construction and/or modification and operation began. In addition, the permittee shall maintain a log of equipment removed from the facility and the date on which it was removed. The log must account for all equipment present at the facility at any given time. Attachment D, or equivalent forms may be used for this purpose.
- iii. If the permittee wishes to make physical or operational changes that are not deemed consistent with the physical or operations changes listed in the PAL permit and are not exempt from construction permitting, then the permittee must first apply for and obtain a construction permit or revision.

c. Notification of Actual Construction of Change:

The owner or operator shall submit written notification to the District at least ten days prior to the actual construction change to or addition of any emission unit covered by the PAL permit that are not excluded under Specific Conditions S1.h. The notification shall contain the following:

- i. Detailed description of the physical or operational change including the effect on existing equipment;
 - ii. A plant layout diagram with representation of existing equipment and physical or operational changes;
 - iii. A schedule of construction activities related to the change;
 - iv. A statement of applicability for any New Source Performance Standard, National Emissions Standard of Hazardous Air Pollutants and /or local regulations not identified as core requirements in the operating permit;
 - v. Potential emissions resulting from the change;
 - vi. A statement of verification that the physical or operational change will not result in plantwide emissions that exceed the Plantwide Applicability Limits; and
 - vii. A summary of the impact analysis on the capture efficiency as outlined in Specific Condition S2.i. for those units where compliance with an applicable emission limit or standard is dependent upon the use of the control device.
- d. Portions of the notification such as descriptions of changes and associated applicability determination shall become an enforceable part of the PAL permit upon receipt by the District.

- e. The District may disapprove any activity that has not demonstrated to the satisfaction of the District to be related to the changes. At the time, the permittee shall cease construction of the change until an appropriate authorization of the activities is obtained (such as a construction permit, if necessary).
- f. **Notification of Actual Start-up of Change:**

The owner or operator shall submit written notification to the District at least ten days prior to the actual start-up or operation of any change listed in the PAL permit. The notification shall contain the following:

 - i. Reference to the notification of actual construction including date of notification and brief description of change;
 - ii. Verification that the physical or operational change was completed as described in the original notification; and
 - iii. Scheduled date operations will be commenced.
- g. It is a violation of this permit for the owner or operator to construct, modify or operate the installation not in accordance with the notification in the Actual Construction of Change and in the Actual Start-up of Change.
- h. The notification letter identified in in the Actual Construction of Change and in the Actual Start-up of Change is not required for sources that are otherwise exempt from the requirement to obtain a permit or are included in the list of insignificant activities in Appendix A to Regulation 1.02.
- i. The PAL shall remain effective during the periods of review of Title V renewal applications regardless of the status of the application or permit shield.
- j. Any physical change or change in the method of operation at the facility that meets the definition of major modification will be subject to major construction permitting requirements.
- k. The owner or operator shall continue to comply with any local or federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period.
- l. Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level:
 - i. Is not a major modification for the PAL pollutant;
 - ii. Does not have to be approved through the PSD program; and

- iii. Is not subject to the provisions addressing restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program.

S2. Monitoring and Record Keeping (Regulation 2.05, section 1 & Regulation 2.03)

- a. The permittee shall maintain a copy of all records necessary to determine compliance with requirements of the PAL, including a determination of each emission unit's monthly and twelve-month rolling total emissions, for five years from the originating date of such record.
- b. The permittee shall retain a copy of the following records for the duration of the PAL effective period plus five years:
 - i. A copy of the PAL permit application and any applications for revisions to the PAL; and
 - ii. Each annual certification of compliance pursuant to Title V and the data relied on in certifying compliance.
 - iii. Copies of any notification for any new or modified emission units that is not subject to the requirement to obtain a Permit to Construct under the provisions of the PAL.
- c. The permittee shall monitor all emission units at the facility in accordance with the specific monitoring requirements contained in each emission unit.
- d. The owner or operator shall maintain records and emission calculations as described below to demonstrate compliance with the PAL. Further, compliance with all other permit conditions and applicable regulations identified within this permit shall be demonstrated using the methods prescribed for each Emission Unit and for each Emission Point.
 - i. Emissions calculations to demonstrate compliance with the PAL include VOC, PM/PM₁₀/PM_{2.5}, CO, SO₂, and NO_x emissions from startups, shutdowns, and malfunctions.
 - ii. Monthly calculations of the 12 month total emissions of VOC, PM/PM₁₀/PM_{2.5}, CO, SO₂, and NO_x.
 - iii. Compliance with applicable emission rates for the E-coat, Guidecoat (primer) and Topcoat systems can be demonstrated based upon the recordkeeping and emissions calculation methods described in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). The same information can be utilized to determine monthly emission rates for support of PAL compliance.

- iv. Compliance with annual emission rates for sealer, black-out/wax, glass installation and purge/cleaning solvent operations, and all other VOC emission units, can be demonstrated using mass balance calculation or other method approve in writing by the District. Monthly material usage data and the applicable VOC content of each material shall be maintained.
- v. Compliance with mass VOC emission limitations for sealer, black-out/wax, glass installation and purge/cleaning solvent operations, can be demonstrated using mass balance calculation or other method approve in writing by the District. Monthly material usage data and the applicable VOC content of each material shall be kept. Daily emission rates shall be determined by prorating monthly usage based on daily production levels.

$$VOCValue = \sum_{i=1}^n U_i V_i (1 - C_i D_i)$$

Where:

- U = material usage
- V = VOC content
- C = capture efficiency
- D = destruction efficiency
- i = number of operating days

- vi. The owner or operator shall correct the capture and destruction efficiency values as appropriate to reflect equipment malfunction, downtime or other periods of reduced performance. Daily usage of each material can be prorated from monthly values based on daily production or other method approve in writing by the District:

$$U_{Daily} = U_{Monthly} \frac{P_{Daily}}{P_{Monthly}}$$

Where:

- U_{Daily} = material usage for a particular calendar day
- U_{Monthly} = recorded material usage for a particular month
- P_{Daily} = recorded vehicle production for a particular day
- P_{Monthly} = total vehicle production for a particular month

- vii. For these operations, the VOC content of each material used shall be determined using U.S. EPA Reference Method 24, manufacturer’s formulation data, or an approved alternative method.

- viii. To demonstrate compliance with the PAL emission limits, the permittee may use either of the following or any other methods approved in writing by the District:

VOC Emission Rate Calculation (tons VOC) (12 month rolling time period)

$$= \sum_{i=1}^n \text{VOC, based on EPA Protocol 450/3-88-018} \left(\frac{\text{tons}}{\text{month}} \right)$$

VOC Emission Rate Calculation (tons VOC) (12 month rolling time period)

$$= \sum_{i=1}^n \frac{\text{Material usage} \left(\frac{\text{gal}}{\text{month}} \right) \times \text{VOC content} \left(\frac{\text{lbs}}{\text{gal}} \right)}{2000 \text{ lbs/ton}}$$

- ix. To demonstrate compliance with *plantwide* NO_x emission limits and to determine PM, PM₁₀ and PM_{2.5} emissions associated with natural gas combustion, the owner or operator shall maintain monthly *plantwide* natural gas usage records. Emissions shall be determined using prorated usage rates and latest available U.S. EPA AP-42 emission factors or vendor emissions data or other methods approved by the District.

$$NO_x / PM_a = \sum_{i=1}^n U_i EF$$

Where:

a = PM subscript for total PM, PM₁₀, or PM_{2.5}

U = material usage

EF = emission factor

i = number of operating months

- x. To demonstrate compliance with the 12 month total *plantwide* PM/PM₁₀ and PM_{2.5} emissions associated with surface coating operations, the owner or operator shall maintain monthly *plantwide* coating usage records. Emissions shall be determined using materials usage rates, solids content, transfer efficiency and particulate control device efficiency, or some combination of these parameters. As an alternative, the facility may rely on stack test data³ or design criteria if such data is available and can provide a

³ Stack test results used for PM_{2.5} shall not include condensable particulate matter as specified in 40. CFR Part 51.166(b)(49(i)(a) as the permit is issued prior to January 1, 2011.

more process-specific emission estimation technique or other method approve in writing by the District.

- xi. The owner or operator shall update and correct capture and destruction efficiency values as appropriate to reflect equipment malfunction, downtime, or other periods of reduced performance.
 - xii. The permittee shall complete the calculations specified in S2.d. 1) through 8) no later than 30 days after the end of the month for which emissions are being calculated. The permittee shall report to the Air Pollution Control District quarterly.
 - xiii. The permittee shall keep documentation of any emission factors used to demonstrate compliance with the limits in S1.a. At the time of submittal, emission factors must be obtained from the most recent edition of AP-42, the most recent stack performance test results, a mass balance approach using the Material Safety Data Sheets (MSDS)/Safety Data Sheets (SDS) of all materials, and/or by a method approved in writing by the District.
 - xiv. The permittee shall keep documentation of any overall control efficiencies used to demonstrate compliance. Overall control efficiency is the product of the capture efficiency and control efficiency of the pollution control device.
- e. Quality Assurance/Quality Control:

Following completion of the initial performance test reports, the owner or operator shall maintain an operation and maintenance plan on site at all times. The plan should be detailed, specific to the Louisville Assembly Plant and include the following information:

- i. A preventative maintenance program for avoidance of excess emissions which shall include all maintenance activities, with inspection schedule, repair actions, and replacements inventory.
- ii. A range of operating conditions and outlet variables for normal operation.
- iii. A summary of operating conditions and outlet variables for all control equipment that will be monitored for malfunction or breakdown and a description of the method of detecting and informing responsible personnel of any malfunction or breakdowns, including alarm systems, lights and other indicators.
- iv. A description of the generic corrective procedures that will be taken in the event of a malfunction or breakdown in order to restore compliance with the applicable emission limitations and permit conditions (e.g. reducing of production rate).

f. Capture and Control Equipment:

The specified control device (e.g. thermal oxidizer, carbon adsorber, and /or fluidized bed carbon concentrator) must be in use at all times when a control efficiency is claimed for compliance with the VOC emissions limitation. When a control efficiency is claimed, the control device shall be operated in accordance with applicable specifications and with the temperature range determined in Specific Conditions S4.

g. Thermal Oxidizer Requirements:

- i. The operating temperature shall be monitored and recorded at least once every 15 minutes when a control efficiency is claimed for compliance with the VOC emissions limitation. The operating temperature of the thermal oxidizer shall be maintained on a rolling 3-hour average within 50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the compliance test specified in Specific Condition S4. The acceptable temperature range may be reestablished by performing a new set of emission tests. The most recent 5 years of records shall be maintained on-site and shall be made immediately available upon request.
- ii. An assessment of thermal oxidizer valve operation and leakage shall be conducted as part of the maintenance and inspection activities, at least once every 18 months.

h. Carbon Adsorber and Fluidized Bed Concentrator Requirements:

- i. The owner or operator shall monitor the desorption gas inlet temperature on the carbon adsorption and/or the SCR temperature on a fluidized bed concentrator unit with an appropriate monitoring device to ensure that the device is operating properly when a control efficiency is claimed for compliance with the VOC emissions limitation.
- ii. For each monitoring device on each carbon adsorption device and/or fluidized bed concentrator unit, the owner or operator shall record the monitoring device required in 1) above, the parameters that will be monitored (e.g. desorption temperature), the frequency that the unit is monitored, and the temperature range as determined in Specific Condition S4.

i. Capture and Control Equipment Requirements:

- i. For equipment where compliance is based on a capture efficiency, the owner or operator shall evaluate changes that involve emissions directed to emission control equipment where compliance with an applicable emission limit or standard is dependent upon the use of the control device subject to

- the change for potential impacts to emission control equipment capture efficiency. This evaluation shall include the following:
- 1) An impact analysis of the change on the capture efficiency;
 - 2) A determination of the need for a new capture efficiency test based on the impact analysis;
 - 3) A summary of the evaluation to be included in the Notification of Actual Construction as stated in Specific Condition S1.c.
- ii. Within 180 days of startup of new projects, for equipment where compliance is based on a capture efficiency, the owner or operator shall develop a monitoring plan for each capture system (booth) that:
- 1) Identifies the operating parameter(s) to be monitored to assure capture efficiency,
 - 2) Explains why this parameter is appropriate for demonstrating ongoing compliance,
 - 3) Identifies the specific monitoring procedures, and
 - 4) Specifies the operating parameter value or range of values (or the procedures for establishing the values) that shall be maintained to demonstrate capture efficiency is being maintained.
- iii. For equipment where compliance is based on a capture efficiency, the owner or operator shall install and maintain, for any continuously and intermittently controllable work station, a system to monitor when bypass of the control device system occurs while the work station is in operation.
- iv. For equipment where compliance is based on a capture efficiency; the owner or operator shall maintain operating and maintenance records for the capture and control systems (enclosures and controls) for a period of 5 years which shall include the following:
- 1) Incidents of startup, shutdown or malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacement, etc.
 - 3) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.
- j. The owner or operator has the flexibility to change any of their control devices as long as the owner or operator can demonstrate to the District upon request that the new equipment has the same or better control efficiency as the current control devices. The requirement for the same or better control efficiency applies only to situations where compliance with an applicable emission limit or standards is dependent upon the use of a control device.

S3. Reporting (Regulation 2.05, section 1 & Regulation 2.03)

The owner or operator shall submit a summary of required monitoring reports at least once every three months, unless more frequent reporting is required by an applicable requirement.

a. Quarterly report:

The reporting period shall be January 1 through March 31, April 1 through June 30, July 1 through September 30 and October 1 through December 31 of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period.

- i. The facility ID and the construction permit number.
- ii. Total annual emissions (tons per year) based on a twelve-month rolling total for each month in the reporting period.
- iii. A list of any emissions units modified or added to the major stationary source during the preceding three-month period (including exempt and insignificant sources).
- iv. The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
- v. A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the monitored pollutant.
- vi. A signed statement by the responsible official certifying the truth, accuracy, and completeness of the information provided in the report.

b. Deviation report:

The owner or operator shall promptly submit reports of any deviation from or exceedance of the PAL requirements, including periods where no monitoring is available. The deviation reports shall be submitted within the time limits prescribed by Regulation 1.07. The reports shall contain the following information:

- i. The identification of owner and operator, the facility ID, and the permit numbers for any applicable permits;
- ii. The PAL requirement that experienced the deviation or the exceedance;
- iii. Emissions resulting from the deviation or the exceedance; and

- iv. Identification of all periods of control devices bypassing or downtime; or a negative declaration; and
- v. A signed statement by the Responsible Official that includes the following statement as specified in District Regulation 2.16 “Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.”.

S4. Testing (Regulation 2.05, section 1 & Regulation 2.03)

- a. Within the initial 10-year term of the PAL permit and at least within 10 years of the most recent performance tests, the owner or operator shall conduct performance tests on existing control devices and any future control devices used for compliance with the PAL in accordance with the schedule identified below:

Control Devices:

- Thermal Oxidizers C10A E-Coat Oven RTO
 C10B E-Coat Oven (3rd Pass) RTO
 C12C 3-Wet System, Salem RTO
 C12H 3-Wet System, Eisenmann RTO
 C12D 3-Wet System, Durr RTO
- Carbon Adsorbers C12B North 3-Wet System Booth
 C12G South 3-Wet System Booth

Table 1: Control Device Test Dates

Control Device	Test Date
C10A E-Coat Oven RTO	03/2015
C10B E-Coat Oven (3 rd Pass) RTO	03/2015
C12C 3-Wet System, Salem RTO	08/2012
C12H 3-Wet System, Eisenmann RTO	08/2012
C12D 3-Wet System, Durr RTO	01/2012
C12B North 3-Wet System Booth	01/2012
C12G South 3-Wet System Booth	08/2012

- i. Conduct performance tests to determine the VOC destruction and /or removal efficiencies and operating parameters of these control devices;
- ii. Conduct performance tests to verify the operating parameters and/or control efficiencies of the control devices;
- iii. Confirm the capture efficiencies of the total or partial enclosures by Specific Condition S4.b.i.) or S4.b.ii.); and

- iv. For any control device installed subsequent to the issuance of this construction permit, performance tests shall be performed no later than 180 days after initial start-up of the control equipment.
- b. For each capture system, the owner or operator shall:
 - i. Confirm that the capture system continues to meet the requirements of EPA Method 204 from an approved performance test with no changes to operating parameters, or
 - ii. Conduct a performance test to determine the capture efficiency and establish the temperature value or range of values for the selected operating parameter(s) when all the processes controlled by these devices are in normal operation.
- c. Proposed Test Plan:

A completed Proposed Test Plan must be submitted to the Air Pollution Control District, within twenty-five (25) days prior to the proposed test date so that the District may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved prior to conducting the required emission testing.
- d. A copy of a written report of the performance test results shall be submitted to the District within sixty (60) days of completion of any required testing, unless an extension is requested and approved by the District.
 - i. The report must include legible copies of raw data sheets, analytical instrument laboratory data and complete sample calculations from the required U.S. EPA Method for at least one sample run.
 - ii. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable local or federal rules or regulations.

Emission Unit U002 – U004: Five Boilers**U002 – U004 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.07	Standards of Performance for Existing Indirect Heat Exchangers	1 through 4
6.42	Reasonable Available Control Technology Requirements for Major Volatile Organic Compound	1.2, and 2 through 5
7.06	Standards of Performance for New Indirect Heat Exchangers	1 through 5
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	60.48c
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	63.7480 through 63.7485

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 3
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U002 – U004 Equipment

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E02A ⁴	One (1) Powerhouse Wickes boiler; 146 MMBtu/hr; natural gas-fired with propane backup. Installation 1954 ⁵	STAR* 6.07, 6.42 and 40 CFR 63 Subpart DDDDD	NA	S-341
E04A	One (1) Cleaver-Brooks dock boiler (No. 1); 63.6 MMBtu/hr; natural gas-fired with propane backup. Installation 1995	STAR* 7.06, 6.42, 40 CFR 60 Subpart Dc and 40 CFR 63 Subpart DDDDD	NA	S-338
E04B	One (1) Cleaver-Brooks boiler (No. 2); 63.6 MMBtu/hr; natural gas-fired, with propane backup. Installation 1995	STAR*, 7.06, 6.42, 40 CFR 60 Subpart Dc and 40 CFR 63 Subpart DDDDD	NA	S-338
E06	One (1) Filterhouse boiler; 8.1 MMBtu/hr; natural gas-fired.	STAR* and 40 CFR 63 Subpart DDDDD	NA	NA
E05	Two (2) hot water boilers; 33.5 MMBtu/hr; natural gas-fired. Installation 1996	STAR*, 7.06 and 40 CFR 60 Subpart Dc	NA	NA
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.				

U002 – U004 Control Devices: There are no control devices associated with Emission Unit U002 – U004.

⁴ Ford currently has a 146 MM Btu/hr boiler emission point E02A, however to keep 40 CFR 60, Subpart Db from being applicable, Ford can only install additional boilers less than 100 MM Btu/hr.

⁵ There are two (2) additional Wickes boilers in the powerhouse, each having previously been coal-fired, but have been decommissioned.

U002 – U004 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

- i. The owner or operator must conduct a one-time energy assessment performed by a qualified energy assessor. This assessment must meet the requirements outlined in 40 CFR 63, subpart DDDDD, Table 3, item 4. (40 CFR 63.7500(a)(1))⁶
 - 1) Visual inspection;
 - 2) An evaluation of operating characteristics of the facility;
 - 3) Inventory of major energy-consuming systems;
 - 4) A review of available architectural and engineering plans;
 - 5) A review of the facility's energy management practices;
 - 6) A list of major energy conservation measures;
 - 7) A list of energy savings for the major energy conservation measures identified; and
 - 8) A comprehensive report detailing the ways to improve efficiency.
- ii. The owner or operator must meet each work practice standard in Table 3 to 40 CFR 63 Subpart DDDDD that applies to your boiler or process heater, for each boiler or process heater.⁷
- iii. At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))
- iv. The owner or operator must be in compliance with the emission limits, work practice standards, and operating limits in 40 CFR 63 Subpart DDDDD. These limits apply to you at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f). (40 CFR 63.7505(a))
- v. The owner or operator of a boiler or process heater has a heat input capacity of 10 million Btu per hour greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as

⁶ The one-time energy assessment was done November 20, 2015 per 40 CFR 63.7495(b).

⁷ There are no numerical emissions standards for natural gas-fired boilers.

specified in 40 CFR 63.7540(a)(10)(i) through (vi). This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. (40 CFR 63.7540(a)(10) and 40 CFR 63.7515(d))

- vi. The owner or operator of a boiler or process heater has a heat input capacity of less than 10 million Btu per hour, you must conduct an biennial tune-up of the boiler or process heater to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (vi). (40 CFR 63.7540(a)(11) and 40 CFR 63.7515(d))
- 1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; (40 CFR 63.7540(a)(10)(i))
 - 2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; (40 CFR 63.7540(10)(ii))
 - 3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown); (40 CFR 63.7540(a)(10)(iii))
 - 4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject; and (40 CFR 63.7540(a)(10)(iv))
 - 5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
- vii. If the owner or operator are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-

up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later. (40 CRF 63.7515(d))

viii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

b. **NO_x**

- i. The owner or operator shall not allow or cause the plantwide NO_x emissions to exceed 99 tons during any consecutive 12-month period in order to stay below NO_x RACT applicability threshold.⁸ (Regulation 6.42)
- ii. For Emission Points E04A, E04B and E05, the owner or operator shall not allow or cause NO_x emission to exceed 37 tons per boiler during March 1 through October 31.
- iii. For Emission Point E02A, no boiler shall have a monthly capacity factor greater than 10.0% for any month during the period March 1 to October 31. The term “monthly capacity factor” means the ratio between the actual heat input to a boiler from fuel combusted during a month and the potential heat input to a boiler from fuel combusted during a month and the potential heat input to the boiler had it been operated for 24 hours per day for the number of days in the month at the maximum steady state design heat input capacity.

c. **Opacity**

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility particulate matter emissions which exhibit greater than 20% opacity. (Regulation 6.07, section 3.2 and Regulation 7.06, section 4.2)

d. **PM/PM₁₀/PM_{2.5}**

- i. For Emission Point E02A, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter

⁸ The PAL permit #245-09-C(R1) supersedes construction permit #623-94-C and the plantwide NO_x limit has replaced the 39.9 tpy PSD/NSR NO_x avoidance limit for the two (2) Cleaver-Brooks boilers (E04A and E04B).

- in excess of 0.30 pounds per million BTU actual total heat input.⁹
(Regulation 6.07, section 4.1)
- ii. For Emission Points E04A and E04B, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.14 pounds per million BTU actual total heat input.⁹
(Regulation 7.06, section 4.1)
 - iii. For Emission Points E05, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.13 pounds per million BTU actual total heat input.⁹
(Regulation 7.06, section 4.1)
 - iv. For Emission Points E06, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.56 pounds per million BTU actual total heat input.⁹
(Regulation 7.06, section 4.1)
 - v. [See Plantwide Applicability Limit \(PAL\) Standards](#)
- e. **SO₂**
- i. For Emission Point E02A, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 0.998 pounds per million BTU actual total heat input for combustion of liquid and gaseous fuels.⁹ (Regulation 6.07, section 4.1)
 - ii. For Emission Points E04A and E04B, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 1.0 pounds per million BTU actual total heat input for combustion of liquid and gaseous fuels.⁹ (Regulation 7.06, section 5.1.1)
 - iii. For Emission Point E05, the owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 0.96 pounds per million BTU actual total heat input form combustion of liquid and gaseous fuels.

⁹ A one-time PM and SO₂ compliance demonstration has been performed for the boilers, using AP-42 emission factors and combusting natural gas, and the emission standards from Regulations 6.07 and 7.06 cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for this boiler with respect to Regulation 6.07 and 7.06 PM and SO₂ emission limits.

f. **TAC¹⁰**

[See Plantwide STAR Standards](#)

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **HAP**

- i. The owner or operator shall conduct a one-time energy assessment performed by a qualified energy assessor (40 CFR 63.7575).
- ii. The assessment must meet the requirements outlined in 40 CFR 63, subpart DDDDD, Table 3, item 3.
 - 1) For Emission Points E02A, E04A, and E04B, conduct a tune-up of the boiler or process heater annually as specified in §63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart. (40 CFR 63, subpart DDDDD, Table 3)
 - 2) For Emission Point E06, conduct a tune-up of the boiler or process heater biennially as specified in §63.7540. (40 CFR 63, subpart DDDDD, Table 3)
 - 3) For affected sources subject to the work practice standard, you must conduct a performance tune-up annually or biennially according to §63.7540(a)(10) or (11). Each annual tune-up specified in §63.7540(a)(10) must be conducted no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. (40 CFR 63.7515(d))
- iii. The owner or operator shall maintain on-site and submit, if requested by the Administrator, an annual report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C). (40 CFR 63.7540(a)(10)(vi))
 - 1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or

¹⁰ The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.01, section 1.6.7)

typical operating load, before and after the tune-up of the boiler or process heater; and (40 CFR 63.7540(a)(10)(vi)(A))

- 2) A description of any corrective action taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))

b. **NO_x**

The owner or operator shall calculate the monthly and 12-month rolling total plantwide total NO_x emissions each month and per each Emission Point.

c. **Opacity**

There are no monitoring or record keeping requirements for Opacity compliance.¹¹

d. **PM/PM₁₀/PM_{2.5}**

- i. There are no monitoring or record keeping requirements for PM compliance.¹²

- ii. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

e. **SO₂**

- i. The owner or operator shall record and maintain records of the amount of each fuel combusted during each calendar month. (40 CFR 60.48c(g)(2))

- ii. As an alternative to meeting the requirements of 40 CFR 60.48c(g)(2), the owner or operator shall record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. (40 CFR 60.48c(g)(3))

- iii. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

f. **TAC**

There are no monitoring or record keeping requirements for TAC compliance.

¹¹ The District has determined that using a natural gas fired boiler will inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.

¹² A one-time PM and SO₂ compliance demonstration has been performed for the boiler, using AP-42 emission factors and combusting natural gas, and the emission standards from Regulations 6.07 and 7.06 cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements for this boiler with respect to PM and SO₂ Regulation 6.07 and 7.06 emission limits.

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall report the following information, as required by General Condition 14:

a. HAP

The owner or operator must report each instance in which each operating limit in Table 3 to 40 CFR 63 Subpart DDDDD that applies was not met. These instances are deviations from the operating limits in 40 CFR 63 Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550. (40 CFR 63.7540(b))

b. NO_x

[See Plantwide Applicability Limit \(PAL\) Reporting](#)

c. Opacity

There are no reporting requirements for Opacity compliance.

d. PM/PM₁₀/PM_{2.5}

[See Plantwide Applicability Limit \(PAL\) Reporting](#)

e. SO₂

[See Plantwide Applicability Limit \(PAL\) Reporting](#)

f. TAC

There are no reporting requirements for TAC compliance.

Emission Unit U008: Volatile Organic Liquid (VOC) Storage Tanks**U008 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1 through 5
7.12	Standards of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 5, 7 and 8
40 CFR 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	63.2346, 63.2343(a), and (b), 63.2394(b) and (c), 63.2386 and (e)

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U008 Equipment

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E08A	6000 Gallon Methanol Tank, Submerged Fill	STAR* 7.12 and 40 CFR 63 Subpart EEEE	NA	NA
E08G	Two (2) 7,500 Gallon Solvent Tank	STAR* and 7.12	NA	NA
E08M	20,000 Gallon Anti-Freeze Tank		NA	NA
E08N	20,000 Gallon Power Steering Fluid Tank		NA	NA
E08O	6000 Gallon Brake Fluid Tank		NA	NA
E08P	20,000 Gallon Diesel Fuel Tank		NA	NA
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.				

U008 Control Devices: There are no control devices associated with Emission Unit U008.

U008 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

- i. For Emission Point E08A, in the event that the permittee changes the material in an existing affected storage tank that contains an organic liquid is equal to or greater than 5,000 gallons in such a way that the annual average true vapor pressures of the total organic hazardous air pollutant is above 4.0 psia, the permittee shall be subject to additional requirements pursuant to 40 CFR Part 63 Subpart EEEE and shall ensure compliance with those requirements. (40 CFR 63.2346)
 - 1) For each existing affected storage tank that contains an organic liquid with a capacity of less than 5,000 gallons, records must be kept of the identity of the tank and the capacity of the tank (in gallons). Affected tanks are those tanks that contain organic liquid with a HAP content of 5 percent or greater by weight, as defined under 40 CFR §63.2406 and Table 1 of 40 CFR Part 63 Subpart EEEE. (63.2343(a))
 - 2) For each existing affected storage tank that contains an organic liquid with a capacity of more than 5,000 gallons and contains an organic liquid with a HAP content of 5 percent or greater by weight, the following records must be kept:
 - (a) The identity of the tank and the capacity of the tank (in gallons),
 - (b) The tank contents,
 - (c) The annual average true vapor pressure of the total organic hazardous air pollutant in the organic liquid (as defined under 40 CFR §63.2406 and Table 1 of 40 CFR Part 63 Subpart EEEE). (40 CFR 63.2343(b))
 - 3) These records must be kept up-to-date and available for inspection. (40 CFR 63.2343)
 - 4) All compliance records, notifications and reports, and any updates to those records, shall be retained for five years with two years of records on site. (40 CFR 63.2394(b) and (c))

b. **TAC¹³**

[See Plantwide STAR Standards](#)

c. **VOC**

i. The owner or operator shall not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessel(s), unless the storage tank is equipped with a permanent submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank. (Regulation 7.12, section 3.3)

ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **TAC**

[See Plantwide STAR Monitoring and Record Keeping](#)

b. **VOC**

i. The owner or operator of the storage vessel(s) shall maintain records of the material stored and the vapor pressure in each storage vessel and if the contents of the storage vessel(s) are changed a record shall be made of the new contents, the date of the change, and the new vapor pressure.

ii. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall report the following information, as required by General Condition 14:

¹³ The uncontrolled potential TAC emissions from this Emission Unit are less than the *de minimis* levels in Regulations 5.00 and 5.21

a. HAP

- i. For each existing affected storage tank that has a capacity of more than 5,000 gallons, the permittee must submit an Initial Compliance Report¹⁴ that contains the following information (40 CFR 63.2343 (b) and 63.2386):
 - 1) Company name and address.
 - 2) Statement by a responsible official, including the official's name, title and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the in the report are true, accurate and complete.
 - 3) A listing of all existing affected storage tanks greater than 5,000 gallons that contain an organic liquid where the annual average true vapor pressure of the total organic hazardous air pollutant (as defined under Table 1 of 40 CFR Part 63 Subpart EEEE) is below 4.0 psia.
- ii. The permittee must submit a subsequent Compliance Report if any of the following occurs (40 CFR 63.2343(b)(2)(i)):
 - 1) The permittee changes the materials in an existing affected storage tank that has a capacity equal to or greater than 5,000 gallons in such a way that the annual average true vapor pressure of the total organic hazardous air pollutant is above 4.0 psia.
 - 2) The permittee installs a new affected storage tank with a capacity equal to or greater than 5,000 gallons.
 - 3) There are changes to the information reported.
- iii. Each subsequent Compliance Report shall be submitted with the next Title V semi-annual report. (40 CFR 63.2386(e))

b. TAC

[See Plantwide STAR Reporting](#)

c. VOC

- i. [See General Plantwide Permit Reporting Requirement](#)
- ii. [See Plantwide Applicability Limit \(PAL\) Reporting](#)

¹⁴ The Initial Notification was submitted 5/27/2004.

Emission Unit U009: Glass Installation**U009 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.59	Standards of Performance for New Miscellaneous Metal Parts and Products Surface Coating Operations	1 through 7
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart III	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	63.3091, 63.3092, 63.3093, 63.3094, 63.3100, 63.3110, 63.3120, 63.3130, 63.3151, 63.3152, 63.3160, 63.3163, 63.3168 and 63.3173

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.00	Definitions	1, 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 3
5.01	General Provisions	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U009 Equipment

Emission Point	Description	Applicable Regulation	Control ID	Stack ID
E09A	Glass, Windshield, and Back Lights Installation	STAR*, 7.59 and 40 CFR 63 Subpart III	NA	S-400
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.				

U009 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Standards](#)

b. **TAC¹⁵**

[See Plantwide STAR Standards](#)

c. **VOC**

- i. The owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 0.42 kg of VOC/l (3.5 lb VOC/gal) of coating, excluding water and exempt solvents, as applied for extreme performance coatings. (Regulation 7.59, section 3.1.3)

- ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **VOC**

- i. The owner or operator shall maintain the following monthly records of calculations of daily usage and VOC emissions from each facility by prorating monthly net usage based on daily vehicle production. (Regulation 1.05, section 4)
- i. An owner or operator of an affected facility subject to this regulation shall maintain records that include the following: (Regulation 7.59, section 6.1)
 - 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
 - 2) The application method and substrate type (metal, plastic, etc.),
 - 3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt

¹⁵ The uncontrolled potential TAC emissions from this Emission Unit are less than the *de minimis* levels.

compounds) used at each point of application during the calendar month.

- 4) The VOC content as applied in each coating and solvent,
- 5) The date, or usage record period, for each application of coating and solvent,
- 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used during the calendar month.

ii. The VOC content shall be calculated using a percent solids basis (excluding water and exempt solvents) for coatings using EPA Method 24. (Regulation 7.59, section 6.2)

iii. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

b. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Monitoring and Record Keeping](#)

c. **TAC**

[See Plantwide STAR Monitoring and Record Keeping](#)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit the reports by the 60th day following the end of each calendar half (or other calendar reporting period, as appropriate), specified by 40 CFR 60 Subpart A.

a. **VOC**

i. [See General Plantwide Permit Reporting Requirements](#)

ii. [See Plantwide Applicability Limit \(PAL\) Reporting](#)

b. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Reporting](#)

c. **TAC**

[See Plantwide STAR Reporting](#)

Emission Unit U010: E-Coat Operation**U010 Applicable Regulations¹⁶**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
6.17	Standards of Performance for Existing Automobile and Truck Surface Coating Operations	1 through 6
7.01	General Provisions	7.2
7.08	Standards of Performance for New Process Operations	1 through 3
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	63.3091, 63.3092, 63.3093, 63.3094, 63.3100, 63.3110, 63.3120, 63.3130, 63.3151, 63.3152, 63.3160, 63.3163, 63.3168 and 63.3173

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 2
5.14	Hazardous Air Pollutants and Source Categories	1 and 2

¹⁶ There are no TACs emitted from this Emission Unit.

U010 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E10A	E-Coat Dip Tank	6.17, 7.01, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	NA
E10B	E-Coat Oven	6.17, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	C10A
E10C	E-Coat Oven (3 rd Pass)	6.17, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	C10B
E10D	E-Coat Dump Metal AST	6.17, 7.01, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	NA
E17A	E-Coat Scuff Booth	7.08	C17A

U010 Control Devices

ID	Description	Performance Indicator	Stack ID
C10A	One (1) Regenerative Thermal Oxidizer (RTO)	Temperature	S-041, S-043, S-045
C10B	One (1) Regenerative Thermal Oxidizer (RTO)	Temperature	S-020 to S-022, S-050
C17A	Dry Panel Filter	N/A	S-047, S-048

U010 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Standards](#)

b. NO_x

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO₂.¹⁷ (Regulation 7.08, section 4)

c. Opacity

For Emission Point E17, the owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. PM/PM₁₀/PM_{2.5}

i. For Emission Point E17A, the owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2)

ii. The owner or operator shall not operate the scuff booth unless the particulate filters are installed and operating properly. The owner or operator shall follow good operating practices for the particulate filters.

e. VOC

i. The owner or operator shall be subject to the following emission limits (40 CFR 60.392, Regulation 7.01 section 7.2, and Regulation 6.17, section 3):

1) When the solids turnover ratio (R_T) is ≥ 0.16 , not exceed 1.4 lbs/gal (0.17 kg/l) of applied coating solids.

2) When the R_T is ≥ 0.04 and < 0.16 , not exceed the weight per gallon limit calculated as follows:

$$0.17 \times 350^{(0.160 - R_T)} \text{ kg of VOC per liter of applied coating solids.}$$

¹⁷ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

- 3) When the R_T is < 0.040 , not be subject to an emission limit established pursuant to this regulation.

ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Monitoring and Record Keeping](#)

b. **NO_x**

There are no monitoring or record keeping requirements for NO_x compliance.¹⁸

c. **Opacity**

See PM/PM₁₀/PM_{2.5} monitoring and record keeping requirements.

d. **PM/PM₁₀/PM_{2.5}**

- i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
- ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities.

e. **VOC**

- i. The owner or operator which uses an incinerator to comply with the emission limits specified under 60.392 shall install, calibrate, maintain, and operate temperature measurement devices: (40 CFR 60.394)
 - 1) Where thermal incineration is used, a temperature measurement device shall be installed in the fire box. (40 CFR 60.394(a))
 - 2) Each temperature measurement device shall be installed, calibrated, maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of

¹⁸ A one-time NO_x compliance demonstration has been performed using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

+/-5 percent of the temperature being measured expressed in degrees Celsius of +/-2.5 °C. (40 CFR 60.394(b))

- 3) Each temperature measurement device shall be equipped with a recording device so that a permanent record is produced. (40 CFR 60.394(c))
- ii. Monitor and record ongoing compliance by calculating monthly, the daily volume-weighted average VOC content of the coatings used. Procedures used for this determination may be those provided in the “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22). (Regulation 6.17, section 4.2)
- iii. Record monthly the quantity of resin, pigment, and flow control additive added to the electrocoat system.
- iv. Determine and record monthly usage of each material.
- v. The owner or operator shall, during operation of any coating operation(s) for which emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, maintain the afterburners combustion chamber temperature at $\geq 760^{\circ}\text{C}$ or other temperature, as determined during the latest stack test and approved in writing by the District, based upon a three hour average, and maintain a combustion chamber temperature of no more than 28°C (50°F) below the average combustion temperature. In addition, the afterburners shall have a minimum residence time of 0.5 seconds. The temperature shall be recorded using a recorder, which shall be calibrated and maintained according to the manufacturer’s specifications. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations.
- vi. Calculations shall incorporate control efficiency where being relied upon for compliance purposes and shall include downtime adjustments to account for increased emissions during the period the afterburners were not operating. If used for compliance, the owner or operator shall also maintain records of control downtimes and bypasses, including the date and duration of each occurrence.
- vii. The owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration.

- viii. Use EPA Method 24 to determine the amount of VOC in the coating. The following equation may be used as an alternate method to demonstrate compliance: (Regulation 6.17, sections 4.5 and 4.6)

$$VOC_w = \sum_{i=1}^n \frac{V_i C_i}{V_t}$$

Where:

VOC_w = the weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given month.

V_i = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

C_i = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

V_t = total volume of all coatings applied each month on a coating line, less water and exempt solvents.

- ix. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit the reports by the 60th day following the end of each calendar half (or other calendar reporting period, as appropriate), specified by 40 CFR 60 Subpart A.

- a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Reporting](#)

- b. **NO_x**

There are no reporting requirements for NO_x compliance.¹⁹

¹⁹ A one-time NO_x compliance demonstration has been performed using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

c. **Opacity**

See PM/PM₁₀/PM_{2.5} reporting requirements.

d. **PM/PM₁₀/PM_{2.5}**

Any deviation from the requirement to perform monthly visible inspections of the scuff booth PM filter system.

e. **VOC**

i. The volume weighted average mass of VOC per volume of applied coating solids for each affected facility during each calendar quarter. Identify any periods for which this value exceeds the standard specified for this parameter in S1.a.i. (40 CFR 60.395(b))

ii. Identify every 3-hour block average period in which the RTO chamber temperature is more than 28°C (50° F) less than the average chamber temperature during the most recent control device performance test. (40 CFR 60.395(c)(1))

iii. A negative declaration if there were no exceedances or deviation from any emission or temperature control standards. (40 CFR 60.395(b) and (c)(3))

iv. [See General Plantwide Permit Reporting Requirements](#)

v. [See Plantwide Applicability Limit \(PAL\) Reporting](#)

Emission Unit U011/U012: Guidecoat (Primer) and Topcoat (Basecoat) Operations – 3-Wet System (prime/basecoat/clearcoat)

U011/U012 Applicable Regulations

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
6.17	Standards of Performance for Existing Automobile and Truck Surface Coating Operations	1 through 6
7.01	General Provisions	7.2
7.08	Standards of Performance for New Process Operations	1 through 3
7.59	Standards of Performance for New Miscellaneous Metal Parts Products Surface Coating Operation	1 through 7
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	63.3091, 63.3092, 63.3093, 63.3094, 63.3100, 63.3110, 63.3120, 63.3130, 63.3151, 63.3152, 63.3160, 63.3163, 63.3168 and 63.3173

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.00	Definitions	1, 2
5.01	General Provisions	1 through 2
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 3
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.23	Categories of Toxic Air Contaminants	1 through 6

U011/U012 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E11A/E12A	Guidecoat (Primer)/North Main Enamel Booth and Air Supply (North 3-Wet Booth)	STAR*, 6.17, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart III	C12A, C12E, C12G, C12B, C12C and C12H
E11B ²⁰	Touchup and Blackout Booth	N/A	N/A
E11C/E12B	North Main Enamel Oven		C12D
E11A/E12C	Guidecoat (Primer)/South Main Enamel Booth and Air Supply House (South 3-Wet Booth)	STAR*, 6.17, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart III	C12A, C12E, C12G, C12B, C12C and C12H
E11D/E12D	South Main Enamel Oven		C12D
E11E/E12G	Guidecoat (Primer)/Topcoat Kitchen	STAR*, 6.17, 7.01, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart III	N/A
E12E/E12F ²¹	TuTone/Repair Topcoat Booth and Oven	N/A	N/A
E12H	Topcoat Scuff Booth	7.08	C19A
E12I	TuTone/Repair Scuff Booth	7.08	C20A
E18A	Guidecoat Scuff Booth	7.08	C18A
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.			

U011/U012 Control Devices

ID	Description	Performance Indicator	Stack ID
C12A	Water Wash	N/A	S-125 to S-149
C12E	Water Wash	N/A	S-150 to S-174
C12B	Carbon Adsorber and Fluidized Bed Carbon Concentrator	VOC Concentrations	S-204
C12G	Carbon Adsorber and Fluidized Bed Carbon Concentrator	VOC Concentrations	S-438
C12C	Regenerative Thermal Oxidizer (RTO) Salem	Temperature	S-203

²⁰ The touchup/blackout booth (E11B) is onsite but no longer in use. It is now a pass through point on the paint line with no materials being applied.

²¹ This TuTone/Repair Topcoat Booth and Oven (E12E/E12F) are onsite but no longer in use. The booth is now a pass through point on the paint where no materials are applied.

ID	Description	Performance Indicator	Stack ID
C12H	Regenerative Thermal Oxidizer (RTO) Eisenmann	Temperature	S-439
C12D	Regenerative Thermal Oxidizer (RTO) Durr	Temperature	S-215
C18A	Dry Panel Filter	N/A	S-175 and S-178
C19A	Dry Panel Filter	N/A	S-183 and S-184
C20A	Dry Panel Filter	N/A	S-185 and S-186

U011/U012 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Standards](#)

b. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

c. NO_x

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO₂.²² (Regulation 7.08, section 4)

d. PM/PM₁₀/PM_{2.5}

i. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2)

ii. The owner or operator shall not operate the booths unless the particulate filters are installed and operating properly. The owner or operator shall follow good operating practices for the particulate filters.

e. TAC

[See Plantwide STAR Standards \(See Comment 1\)](#)²³

f. VOC

i. For Emission Points E11A, E12A, E11C/E12B, E12C, E11D/E12D and E11E/E12G:

- 1) The owner or operator shall be subject to the limit of 1.40 kg VOC/l (11.7 lb VOC/gal) of applied coating solids, less water and exempt solvents from each guidecoat (primer) operation. (40 CFR 60.392(b))

²² Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

²³ All of the TACs from this Emission Unit are Environmentally Acceptable at uncontrolled potential.

- 2) The owner or operator shall be subject to the limit of 1.8 kg VOC/l (15.1 lb VOC/gal) of applied coating solids, less water and exempt solvents from guidecoat (primer) surface coating line. (Regulation 7.01 section 7.2 and Regulation 6.17, section 3.2)
- 3) The owner or operator shall be subject to the limit of 1.47 kg VOC/l (12.3 lb VOC/gal) of applied coating solids, less water and exempt solvents from each topcoat operation. (40 CFR 60.392(c))
- 4) The owner or operator shall be subject to the limit of 11.3 lb VOC/gal of applied coating solids, less water and exempt solvents from topcoat coating line.²⁴ (Regulation 7.01 section 7.2 and Regulation 6.17, section 3.3)

ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Monitoring and Recordkeeping](#)

b. **NO_x**

There are no monitoring or record keeping requirements for NO_x compliance.²⁵

c. **Opacity**

See PM/PM₁₀/PM_{2.5} monitoring and record keeping requirements.

d. **PM/PM₁₀/PM_{2.5}**

- i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.

²⁴ If the source is in compliance with the 40 CFR 60 Subpart MM §60.392 VOC limit then they are in compliance with Regulation 6.17, section 3.3 VOC limit.

²⁵ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

- ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities.

e. **TAC**

[See Plantwide STAR Monitoring and Record Keeping](#)

f. **VOC**

- i. The owner or operator which uses an incinerator to comply with the emission limits specified under 60.392 shall install, calibrate, maintain, and operate temperature measurement devices: (40 CFR 60.394)
- ii. Where thermal incineration is used, a temperature measurement device shall be installed in the fire box. (40 CFR 60.394(a))
- iii. Each temperature measurement device shall be installed, calibrated, maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of +/-5 percent of the temperature being measured expressed in degrees Celsius of +/-2.5 °C. (40 CFR 60.394(b))
- iv. Each temperature measurement device shall be equipped with a recording device so that a permanent record is produced. (40 CFR 60.394(c))
- v. Monitor and record ongoing compliance by calculating monthly, the daily volume-weighted average VOC content of the coatings used. Procedures used for this determination may be those provided in the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).
- vi. The owner or operator shall during operation of any coating operation(s) for which emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, maintain the afterburners combustion chamber temperature at $\geq 760^{\circ}$ C or other temperature, as determined during the latest stack test, based upon a three hour average, and maintain a combustion chamber temperature of no more than 28°C (50°F) below the average combustion temperature. In addition, the afterburners shall have a minimum residence time of 0.5 seconds. The temperature shall be recorded using a recorder, which shall be calibrated and maintained according to the manufacturer's specifications. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations.

- vii. Calculations shall incorporate control efficiency where being relied upon for compliance purposes and shall include downtime adjustments to account for increased emissions during the period the afterburners were not operating. If used for compliance, the owner or operator shall also maintain records of control downtimes and bypasses, including the date and duration of each occurrence.
- viii. The owner or operator shall continuously record the incinerator combustion temperature during coating operations for thermal incineration or the gas temperature upstream and downstream of the incinerator catalyst bed during coating operations for catalytic incineration.
- ix. Record daily the quantity and type of paint withdrawn from the topcoat paint circulation system for use in the final repair operation unless utilizing the alternative method material usage factor of 0.5%.²⁶
- x. Determine daily VOC emissions based on the topcoat and final repair records.
- xi. As an alternative to daily material usage records, the owner or operator may utilize material usage factor of 0.5%.²⁶
- xii. Use EPA Method 24 to determine the amount of VOC in the coating. The following equation may be used as an alternate method to demonstrate compliance:

$$VOC_w = \sum_{i=1}^n \frac{V_i C_i}{V_t}$$

Where:

VOC_w = the weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given month.

V_i = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

C_i = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

²⁶ The District has deemed 0.5% as an appropriate material usage factor for Emission Unit U011/U012.

V_t = total volume of all coatings applied each month on a coating line, less water and exempt solvents.

- xiii. Meet the standards specified in 40 CFR 60.392, as calculated using the prescribed transfer efficiency of 40 CFR 60.393(c)(1)(i)(C) for the monthly weighted average mass of VOC emitted per volume of applied coating solids.
- xiv. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit the reports by the 60th day following the end of each calendar half (or other calendar reporting period, as appropriate), specified by 40 CFR 60 Subpart A.

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Reporting](#)

b. **NO_x**

There are no reporting requirements for NO_x compliance.²⁷

c. **Opacity**

See PM/PM₁₀/PM_{2.5} reporting requirement.

d. **PM/PM₁₀/PM_{2.5}**

Any deviation from the requirement to perform monthly visible inspections of the booths PM filter system.

e. **TAC**

[See Plantwide STAR Reporting](#)

f. **VOC**

- i. The volume weighted average mass of VOC per volume of applied coating solids for each affected facility during each calendar month. Identify any periods for which this value exceeds the standard specified for this parameter in S1.a.i. (40 CFR 60.395(b))

²⁷ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

- ii. Identify every 3-hour block average period in which the RTO chamber temperature is more than 28°C (50° F) less than the average chamber temperature during the most recent control device performance test. (40 CFR 60.395(c)(1))
- iii. For catalytic incinerators, every three-hour period shall be reported during which the average temperature immediately before the catalyst bed, when the coating system is operational, is more than 28 °C less than the average temperature immediately before the catalyst bed during the most recent control device performance test at which destruction efficiency was determined. In addition, every three-hour period shall be reported each quarter during which the average temperature difference across the catalyst bed when the coating system is operational is less than 80 percent of the average temperature difference of the device during the most recent control device performance test at which destruction efficiency was determined. (40 CFR 60.395(c)(2))
- iv. A negative declaration if there were no exceedances or deviation from any emission or temperature control standards.
- v. [See General Plantwide Permit Reporting Requirements](#)
- vi. [See Plantwide Applicability Limit \(PAL\) Reporting Requirements](#)

U011/U012 Comments

1. All of the TACs from this Emission Unit are Environmentally Acceptable at uncontrolled potential resulting in the following Risk:

Emission Point	TAC	HQ
E11A/E12A E11C/E12B E11A/E12C E11D/E12D E11E/E12G	Toluene	0.0005
	Ethylene glycol monobutyl ether acetate (EGMbEA)	0.0027
	Xylene	0.2731
	Aluminum	0.4990
	1,2,4-trimethylbenzene	0.2354

U013 Emission Unit Description: Plantwide Gasoline Fueling**U013 Applicable Regulations**

Federally Enforceable Regulations		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	1 through 6

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U013 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E13A	Gasoline Tank #1, 20,000 Gallons	STAR* and 7.15	N/A
E13B	Gasoline Tank #2, 20,000 Gallons		N/A
E13C	Gasoline Tank #3, 20,000 Gallons		N/A
E13D	Two (2) Fueling Stations	N/A ^{28,29}	N/A
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.			

U013 Control Devices: There are no control devices associated with Emission Unit U013.

²⁸ EPA has provided guidance that vehicle production plants doing initial fueling of vehicle comply with vapor recovery requirements by means of ORVR requirements for compliant vehicles. The District concurs that the external vapor recovery system as required by the applicable Title V operating permit for LAP is not required for fueling vehicles with ORVR. The Stage II Vapor Recovery program has been repealed.

²⁹ Regulation 6.40 does not apply to the initial fueling of new motor vehicles at a motor vehicle assembly facility per section 2.1.2.

U013 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. TAC**

[See Plantwide STAR Standards](#)³⁰

b. VOC

i. Storage tanks, Emission Points E13A through E13C, shall be equipped with the following: (Regulation 7.15, section 3.1)

- 1) A submerged fill pipe; (Regulation 7.15, section 3.1.1)
- 2) If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank; (Regulation 7.15, section 3.1.2)
- 3) Vent line restrictions on the affected facility; and (Regulation 7.15, section 3.1.3)
- 4) Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District. (Regulation 7.15, section 3.1.4)

ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. TAC

[See Plantwide STAR Monitoring and Record Keeping](#)

b. VOC

³⁰ The emissions from a motor vehicle fueling or refueling process and process equipment for gasoline and other liquid fuels are *de minimis* under STAR. (Regulation 5.21, section 2.6.)

- i. Storage tanks: To demonstrate ongoing compliance with Regulation 1.05, Section 4, the owner or operator shall monitor the quantity of gasoline used to fuel vehicles.
 - 1) The owner or operator shall daily minimize spills.
 - 2) The owner or operator shall monthly:
 - (a) Check the storage tank fill points for tightness;
 - (b) If a two point vapor recovery system on the storage tank, check rubber gaskets for tears, verify spring loaded valves properly operate and tank refill caps have rubber gaskets in good condition; replace any damaged parts; and
 - 3) The owner or operator shall annually:
 - (a) Verify pressure vacuum valve on vent pipe is operating properly annually and replace any damaged part.
 - (b) The owner or operator must complete all repairs within 5 working days.
- ii. The owner or operator shall record total monthly gasoline throughput and make these records available to the District upon request.
- iii. The owner or operator shall maintain records of the monthly and annual inspections. These records shall contain the date and time of the inspection; who performed the inspection; and the results of the inspection.
- iv. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

a. **VOC**

- i. [See General Plantwide Permit Reporting Requirements](#)
- ii. [See Plantwide Applicability Limit \(PAL\) Reporting Requirements](#)

b. **TAC**

[See Plantwide STAR Reporting Requirements](#)

U014 and U022 Emission Unit Description: Paint Equipment Cleaning Operations**U014 and U022 Applicable Regulations**

Federally Enforceable Regulations		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1 through 4
7.25	Standards of Performance for New Source Using Volatile Organic Compounds	1 through 5
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart III	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	63.3091, 63.3092, 63.3093, 63.3094, 63.3100, 63.3110, 63.3120, 63.3130, 63.3151, 63.3152, 63.3160, 63.3163, 63.3168 and 63.3173

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U014 and U022 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E14A	Paint Equipment Cleaning Booth	STAR*, 7.25 and 40 CFR 63 Subpart III	N/A
E22A	Paint Equipment Purging and Plant Cleaning		N/A
N/A	Solvent Metal Cleaning Equipment ³¹	6.18	N/A
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.			

³¹ The aqueous cold cleaners that contain no VOC are not subject to Regulation 6.18.

U014 and U022 Control Devices: There are no control devices associated with Emission Unit U014 and U022.

U014 and U022 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

- i. The owner or operator shall follow the work practices specified in 40 CFR 63 Subpart III, Specific Condition S1.b and c. to minimize VOC emissions from purge and cleaning operations.
- ii. [See Louisville Assembly Plant, Ford Motor Company MACT Standards Section](#)

b. TAC³²

[See Plantwide STAR Standards](#)

c. VOC

- i. **Applicator Paint Purging:** The automatic spray applicators will incorporate a purge paint and solvent recovery system that will collect the purged materials. (Regulation 7.25, section 3.1) (BACT)
- ii. The owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, section 4)
 - 1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)
 - 2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)
 - 3) A permanent, conspicuous label summarizing the operating requirements shall be installed on or near the cold cleaner. (Regulation 6.18, section 4.1.3)
 - 4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing

³² The uncontrolled potential TAC emissions from this Emission Unit are less than the *de minimis* levels in Regulations 5.00 and 5.21

- device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)
- 5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)
 - 6) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)
- iii. The owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)
- 1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)
 - 2) The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)
 - 3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)
 - 4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)
 - 5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)
 - 6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage

of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)

- 7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)
- 8) The owner or operator shall not operate a cold cleaner used to clean nonpoint or non-sealer related equipment using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)

iv. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Monitoring and Recordkeeping](#)

b. **TAC**

[See Plantwide STAR Monitoring and Record Keeping](#)

c. **VOC**

- i. The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)
 - 1) The name and address of the solvent supplier,
 - 2) The date of the purchase,
 - 3) The type of the solvent, and
 - 4) The vapor pressure of the solvent measured in mm Hg at 20 • C (68°F).
- ii. For Emission Points E14A and E22A, the owner or operator shall, monthly, record the total amount used in gallons of each coating, solvent, cleaner, etc. and calculate the amount of VOC containing material used during the 12 consecutive month period.
- iii. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Reporting](#)

b. **TAC**

[See Plantwide STAR Reporting](#)

c. **VOC**

i. [See General Plantwide Permit Reporting Requirements](#)

ii. [See Plantwide Applicability Limit \(PAL\) Reporting Requirements](#)

U015 Emission Unit Description: Sealer Deck**U015 Applicable Regulations**³³

Federally Enforceable Regulations		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
7.08	Standards of Performance for New Process Operations	4
7.59	Standards of Performance for New Source Using Volatile Organic Compounds	1 through 5
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart III	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	63.3091, 63.3092, 63.3093, 63.3094, 63.3100, 63.3110, 63.3120, 63.3130, 63.3151, 63.3152, 63.3160, 63.3163, 63.3168 and 63.3173

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2

U015 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E15A	Sealer Application	7.59	N/A
E15B	Sealer Gel Oven	7.08 and 40 CFR 63 Subpart III	N/A
N/A	Sealers and Deadeners (other than glass bonding)	40 CFR 63 Subpart III	N/A

U015 Control Devices: There are no control devices associated with Emission Unit U015.

³³ There are no TACs emitted from this Emission Unit.

U015 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Standards](#)

b. NO_x

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO₂.³⁴ (Regulation 7.08, section 4)

c. VOC

i. The owner or operator shall not cause or allow the emission of VOC from any affected facility resulting from the coating of metallic surfaces in excess of 3.5 lb VOC/gal of coating, excluding water and exempt solvents, as applied for extreme performance coatings. (Regulation 7.59, section 3.1.3)

ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. HAP

[See Louisville Assembly Plant, Ford Motor Company MACT Monitoring and Recordkeeping](#)

b. NO_x

There are no monitoring or record keeping requirements for NO_x compliance.³⁵

³⁴ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

³⁵ A one-time NO_x compliance demonstration has been performed using AP-42 emission factors and combusting natural gas, and the emission standard cannot be exceeded. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

c. **VOC**

i. An owner or operator of an affected facility subject to this regulation shall maintain records that include, but not be limited to, the following: (Regulation 7.59, section 6.1)

- 1) The regulation and section number applicable to the affected facility for which the records are being maintained,
- 2) The application method and substrate type (metal, plastic, etc.),
- 3) The amount and type of coatings (including catalyst and reducer for multi-component coatings) and solvent (including exempt compounds) used at each point of application daily.
- 4) The VOC content as applied in each coating and solvent,
- 5) The date, or usage record period, for each application of coating and solvent,
- 6) The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each material used daily.

iv. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit the reports by the 60th day following the end of each calendar half (or other calendar reporting period, as appropriate), specified by 40 CFR 60 Subpart A.

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Reporting](#)

b. **NO_x**

There are no reporting requirements for NO_x compliance.³⁶

c. **VOC**

i. [See General Plantwide Permit Reporting Requirements](#)

³⁶ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

- ii. [See Plantwide Applicability Limit \(PAL\) Reporting](#)

U016 Emission Unit Description: Final Repair Spray Booth**U016 Applicable Regulations**

Federally Enforceable Regulations		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 3, 4 and 5
6.17	Standards of Performance for Existing Automobile and Truck Surface Coating Operations	1 through 6
7.01	General Provisions	7.2
7.08	Standards of Performance for New Process Operations	1 through 3
40 CFR 60 Subpart A	General Provisions	60.1 through 60.18
40 CFR 60 Subpart MM	National Emission Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations	60.390 through 60.397
40 CFR 63 Subpart A	General Provisions	63.1 through 63.16
40 CFR 63 Subpart IIII	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks	63.3091, 63.3092, 63.3093, 63.3094, 63.3100, 63.3110, 63.3120, 63.3130, 63.3151, 63.3152, 63.3160, 63.3163, 63.3168 and 63.3173

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants	1 through 3
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U016 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E16A	Final Repair Booth	STAR*, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	C16A
E16B	Final Repair Oven	STAR*, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	N/A
E16C	Final Repair Spot Paint	STAR*, 7.01, 7.08, 40 CFR 60 Subpart MM and 40 CFR 63 Subpart IIII	N/A
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.			

U016 Control Devices:

ID	Description	Performance Indicator	Stack ID
C16A	Dry Panel Filter	N/A	S-187, S-188

U016 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Standards](#)

b. NO_x

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility or from any air pollution control equipment installed on any affected facility any NO_x fumes in excess of 300 ppm by volume expressed as NO₂.³⁷ (Regulation 7.08, section 4)

c. Opacity

The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. (Regulation 7.08, section 3.1.1)

d. PM

i. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr. (Regulation 7.08, section 3.1.2)

ii. The owner or operator shall not operate the booths unless the particulate filters are installed and operating properly. The owner or operator shall follow good operating practices for the particulate filters.

iii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

e. TAC

[See Plantwide STAR Standards \(See Comment 1\)](#)³⁸

f. VOC

i. The owner or operator shall be subject to the emission limit of 4.8 lbs VOC/gal (0.58 kg/l) of coating, less water and exempt solvents. (40 CFR 60.392, Regulation 7.01 section 7.2 and Regulation 6.17, section 3.4)

³⁷ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

³⁸ All of the TACs from this Emission Unit are Environmentally Acceptable at uncontrolled potential.

- ii. [See Plantwide Applicability Limit \(PAL\) Standards](#)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **HAP**

[See Louisville Assembly Plant, Ford Motor Company MACT Monitoring and Record Keeping](#)

b. **NO_x**

There are no monitoring or recordkeeping requirements for NO_x compliance.³⁹

c. **Opacity**

See PM/PM₁₀/PM_{2.5} monitoring and record keeping requirements.

d. **PM**

- i. The owner or operator shall keep a record that shows the date and the name of the person who inspected the filters and if filters were replaced.
- ii. Proper operation of the fabric filter shall be ensured by maintaining records of inspections and routine maintenance activities.

e. **TAC**

[See Plantwide STAR Monitoring and Record Keeping](#)

f. **VOC**

- i. Monitor and record ongoing compliance by calculating monthly, the daily volume-weighted average VOC content of the coatings used. Procedures used for this determination may be those provided in the “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22).

³⁹ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

- ii. Record daily the quantity and type of paint withdrawn from the topcoat paint circulation system for use in the final repair operation unless utilizing the alternative method material usage factor of 0.5%.⁴⁰
- iii. Determine daily VOC emissions based on the topcoat and final repair records.
- iv. As an alternative to daily material usage records, the owner or operator may utilize material usage factor of 0.5%.⁴⁰
- v. Use EPA Method 24 to determine the amount of VOC in the coating. The following equation may be used as an alternate method to demonstrate compliance:

$$VOC_w = \sum_{i=1}^n \frac{V_i C_i}{V_t}$$

Where:

VOC_w = the weighted average coating VOC content, as applied; and less water and exempt solvents, expressed in pounds of VOC per gallon of coating.

n = number of different coatings used on a coating line a given month.

V_i = the volume of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

C_i = the VOC content of each coating used on a coating line, as applied and less water and exempt solvents, a given month.

V_t = total volume of all coatings applied each month on a coating line, less water and exempt solvents.

- vi. Meet the standards specified in 40 CFR 60.392, as calculated using the prescribed transfer efficiency of 40 CFR 60.393(c)(1)(i)(C) for the monthly weighted average mass of VOC emitted per volume of applied coating solids.
- vii. [See Plantwide Applicability Limit \(PAL\) Monitoring and Record Keeping](#)

⁴⁰ The District has deemed 0.5% as an appropriate material usage factor for Emission Unit U016.

S3. Reporting (Regulation 2.16, section 4.1.9.3)

The owner or operator shall submit the reports by the 60th day following the end of each calendar half (or other calendar reporting period, as appropriate), specified by 40 CFR 60 Subpart A.

a. HAP

[See Louisville Assembly Plant, Ford Motor Company MACT Reporting](#)

b. NO_x

There are no reporting requirements for NO_x compliance.⁴¹

c. Opacity

See PM/PM₁₀/PM_{2.5} reporting requirements.

d. PM

Any deviation from the requirement to perform monthly visible inspections of the Booth PM filter system.

e. TAC

[See Plantwide STAR Reporting](#)

f. VOC

i. The volume weighted average mass of VOC per volume of applied coating solids for each affected facility during each calendar month. Identify any periods for which this value exceeds the standard specified for this parameter in S1.a.i. (40 CFR 60.395(b))

ii. [See General Plantwide Permit Reporting Requirements](#)

iii. [See Plantwide Applicability Limit \(PAL\) Reporting Requirements](#)

U016 Comments

1. All of the TACs from this Emission Unit are Environmentally Acceptable at uncontrolled potential resulting in the following Risk:

⁴¹ Using AP-42 emission factors for combustion of natural gas, the NO_x emission standard cannot be exceeded by any of the natural gas burners which are part of this emission point. Therefore, there are no monitoring, record keeping, and reporting requirements with respect to NO_x emission limits.

Emission Point	TAC	HQ
E16A, E16B, E16C	Toluene	0.000028
	Ethylene glycol monobutyl ether acetate (EGMbEA)	0.000084
	Xylene	0.015406
	Aluminum	0.132620
	1,2,4-trimethylbenzene	0.006463

U023 Emission Unit Description: Phosphate Operation

U023 Applicable Regulations

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1 through 3
5.01	General Provisions	1 through 4
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6

U023 Equipment

Emission Point	Description	Applicable Regulation	Control ID
E1000	Phosphate	STAR*	N/A
E1001	Phosphate Dump Tank	STAR*	N/A
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.			

U023 Control Devices: There are no control devices associated with Emission Unit U023

U023 Specific Conditions

- S1. **Standards** (Regulation 2.16, section 4.1.1)

TAC⁴²

[See Plantwide STAR Standards](#)

- S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

TAC

[See Plantwide STAR Monitoring and Record Keeping](#)

- S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

TAC

[See Plantwide STAR Reporting](#)

⁴² The uncontrolled potential TAC emissions from this Emission Unit are less than the *de minimis* levels in Regulations 5.00 and 5.21

U024 Emission Unit Description: Emergency Engines**U024 Applicable Regulations**

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
5.01	General Provisions	1 through 4
5.14	Hazardous Air Pollutants and Source Categories	1 and 2
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	1 through 6
5.21	Environmental Acceptability for Toxic Air Contaminants	1 through 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	1 through 5
5.23	Categories of Toxic Air Contaminants	1 through 6
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines	§63.6595(a)(1), §63.6604(b), §63.6602, §63.6605(b), §63.6640(a), §63.6640(b), §63.6640(f), 63.6625, §63.6655
40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	§60.4211(a)(1), §60.4211(f), §60.4205(c), §60.4211(c))

U024 Equipment

Emission Point	Description	Applicable Regulation	Installation Date	Control ID
EFP1	#1 Diesel Fire Pump	STAR*, 40 CFR 60 Subpart IIII	2014	N/A
EFP2	#2 Diesel Fire Pump, Detroit Diesel PTA-Y2 SD.30, 180 HP	STAR*, 40 CFR 63 Subpart ZZZZ	1973	N/A
EFP3	#3 Diesel Fire Pump, Detroit Diesel 1800, 300HP	STAR*, 40 CFR 63 Subpart ZZZZ	1995	N/A
EEG1	WWT Emergency Generator	STAR*, 40 CFR 63 Subpart ZZZZ	1983	N/A
EEG2	Guard Building Emergency Generator	STAR*, 40 CFR 63 Subpart ZZZZ	2001	N/A
* STAR rules consist of Regulations 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23.				

U024 Control Devices: There are no control devices associated with Emission Unit U024

U024 Specific Conditions**S1. Standards** (Regulation 2.16, section 4.1.1)**a. HAP**

- i. For Emission Points EFP2, EFP3, EEG1 and EEG2, subject to [40 CFR 63 Subpart ZZZZ](#):
 - 1) An existing stationary CI RICE located at a major source of HAP emissions, the owner or operator shall comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013. (40 CFR 63.6595(a)(1))
 - 2) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. (40 CFR 63.6604(b))
 - 3) The owner or operator of an existing stationary RICE located at an major source of HAP emissions shall comply with the requirements Table 2(c) to this subpart: (40 CFR 63.6602)
 - (a) The owner or operator shall change the oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart. (40 CFR 63, Subpart ZZZZ, Table 2c.(1)(a))
 - (b) The owner or operator shall inspect the air cleaners every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR 63, Subpart ZZZZ, Table 2c.(1)(b))
 - (c) The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. (40 CFR 63, Subpart ZZZZ, Table 2c.(1)(c))

- 4) General requirements for complying with 40 CFR 63, Subpart *ZZZZ*:
- (a) The owner or operator shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the RICE at all times. (40 CFR 63.6605(a))
 - (b) At all times the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6605(b))
- 5) The owner or operator shall demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Table 2c to this subpart. (40 CFR 63.6640(a))
- 6) The owner or operator shall report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a, 1b, 2a, 2b, 2c, and 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. (40 CFR 63.6640(b))
- 7) The owner or operator shall operate the emergency stationary RICE according to the requirements in §§63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §§63.6640(f)(1) through (4), is prohibited. If the owner

or operator does not operate the engine according to the requirements in §§63.6640(f)(1) through (4), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (40 CFR 63.6640(f))

- (a) There is no time limit on the use of the emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
- (b) The owner or operator may operate the emergency stationary RICE for any combination of the purposes specified in §§63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §§63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). (40 CFR 63.6640(f)(2))
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))
 - (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies, or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. (40 CFR 63.6640(f)(2)(ii))

- (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. (40 CFR 63.6640(f)(2)(iii))
 - (c) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in §§63.6640((f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(3))
- ii. For Emission Point EFP1, and subject to 40 CFR 60 IIII:
 - 1) The owner or operator shall operate and maintain the stationary compression ignition internal combustion engines and control devices according to the manufacturer's emission related instructions. (40 CFR 60.4211(a)(1))
 - 2) The owner or operator shall limit the operation of the emergency fire pump to one hundred (100) hours in any calendar year during non-emergency events for the purpose of maintenance and readiness testing. (40 CFR 60.4211(f))
 - 3) The owner or operator of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in Table 4, for all pollutants. (40 CFR 60.4205(c))
 - 4) The owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. (40 CFR 60.4211(c))

b. **TAC**

[See Plantwide STAR Standards](#)⁴³

S2. **Monitoring and Record Keeping** (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the following records for a minimum of 5 years and make the records readily available to the District upon request.

a. **HAP**

i. For Emission Points EFP1, EFP2, EFP3, EEG1 and EEG2, subject to 40 CFR 63 ZZZZ:

1) Monitoring, installation, collection, operation, and maintenance requirements: (40 CFR 63.6625)

(a) The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))

(b) The owner or operator shall install a non-resettable hour meter if one is not already installed. (40 CFR 63.6625(f))

(c) The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup. (40 CFR 63.6625(h))

(d) The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters

⁴³ The uncontrolled potential TAC emissions from this Emission Unit are less than the *de minimis* levels in Regulations 5.00 and 5.21

are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

- 2) Recordkeeping requirements: (40 CFR 63.6655)
 - (a) The owner or operator shall keep the following records that apply to your RICE: (40 CFR 63.6655(a))
 - (i) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
 - (ii) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
 - (iii) Records of all required maintenance performed on the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))
 - (iv) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))

- (v) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))
 - (b) The owner or operator shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to the RICE. (40 CFR 63.6655(d))
 - (c) The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. (40 CFR 63.6655(e))
 - (d) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. (40 CFR 63.6655(f))
- ii. For Emission Points EFP1, subject to 40 CFR 60 IIII:

The owner or operator shall record, on the first working day after the end of each month, each unit's running time meter reading, and calculate (by difference) and record each unit's operating time for the previous month for compliance with the annual hourly time standard.

b. TAC

[See Plantwide STAR Monitoring and Record Keeping](#)

S3. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **HAP**

- i. For Emission Points EFP1, EFP2, EFP3, EEG1 and EEG2, subject to 40 CFR ZZZZ:

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2c of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. (40 CFR 63, Subpart ZZZZ, Footnote 2 of Table 2c)

- ii. For Emission Point EFP1, subject to 40 CFR IIII:

There are no reporting requirements for 40 CFR 60, Subpart IIII compliance.

b. **TAC**

[See Plantwide STAR Reporting](#)

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

<u>Document</u>	<u>Date</u>
<u>Rule Effectiveness Plan (Regulation 1.18)</u>	April 10, 1995

Alternative Operating Scenario

The company requested no alternative operating scenario in its Title V application.

Insignificant Activities

Equipment	Quantity	PTE (tpy)	Regulation Basis
Diesel or fuel oil storage tanks that are not used for distribution, sale or resale, and that have less than two times the capacity of the vessel in annual turnover of the fluid contained.	5	VOC = 0.0005 ⁴⁴	Regulation 1.02, Appendix A, Section 3.25
Brazing, soldering or welding equipment	~ 1.2 Billion Weld/yr	PM ₁₀ = 0.34 tpy	Regulation 1.02, Appendix A, Section 3.4
All pressurized VOC storage vessels.	~ 75	VOC < 0.01 each	Regulation 1.02, Appendix A, Section 3.26
Those less than 10 million BTU/hr capacity using distillate oil, propane, butane, LPG, or natural gas as fuel.	~105 ⁴⁴	NO _x = 4.38 ⁴⁵	Regulation 1.02, Appendix A, Section 1.1
Equipment commonly used in wood-working operations, except for conveying, hogging or burning of sawdust or wood waste.	1	PM ₁₀ = 0.25	Regulation 1.02, Appendix A, Section 3.5
Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants.	3	VOC = 1	Regulation 1.02, Appendix A, Section 3.11
Process, exhaust or ventilating systems in bakeries or eating establishments preparing food for human consumption	1	NO _x = 0.87	Regulation 1.02, Appendix A, Section 3.12

⁴⁴ The sitewide combustion equipment inventory equals 848 MMBtu/hr.

⁴⁵ These type of emissions are quantified in routine reporting to the District.

Equipment	Quantity	PTE (tpy)	Regulation Basis
Dust or particulate collectors that are located indoors, vent directly indoors into the work space, collect no more than one ton of material per year.	1	PM = 0.01	Regulation 1.02, Appendix A, Section 3.21
Portable diesel or gasoline storage tanks with a maximum capacity of less than 500 gallons. Portability is defined as being in one location less than one year.	4	VOC = 0.08 ⁴⁶	Regulation 1.02, Appendix A, Section 3.23
Non VOC Chemical Storage Tanks 4000 gal used oil 11,000 gal Ferric Chloride Misc. empty chemical storage tanks	Varies	--	Regulation 2.16, Section 1.23.1.2
Wastewater Pretreatment System	1	--	Regulation 2.16, Section 1.23.1.2
Cooling Towers	5	PM ₁₀ = 0.75	Regulation 2.16, Section 1.23.1.2
Panel test spray booth (R&D)	1	NA ⁴⁵	Regulation 2.16, Section 1.23.1.2

- 1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
- 2) Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
- 3) The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.
- 6) The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) to be reported on the annual emission inventory.
- 7) The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

⁴⁶ These type of emissions are quantified in routine reporting to the District

Attachment A – Determination of Benchmark Ambient Concentration (BAC)

Category _____ Number _____

Compound name _____ CAS No. _____

Molecular weight _____

BAC_C = _____ µg/m³, annual
de minimis _____ lb/hr; _____ lb/_____; _____ lb/year

I. Carcinogen Risk - BAC_C (annual averaging period) Carcinogen YES NO

1. IRIS 10⁻⁶ risk = _____ µg/m³ URE = _____ (µg/m³)⁻¹ Date _____
2. Cal 10⁻⁶ risk = _____ µg/m³ IUR = _____ (µg/m³)⁻¹ Date _____
3. Mich 10⁻⁶ risk = _____ µg/m³ Date _____
4. NTP Part A YES NO Part B YES NO
5. IARC Group 1 YES NO Group 2A YES NO Group 2B YES NO
6. ATSDR
7. Sec. 3.3.4 Method # _____ 10⁻⁶ risk = _____ µg/m³ Date _____
8. Default 0.0004 µg/m³

II. Chronic Noncancer Risk - BAC_{NC} (averaging period as specified)

1. IRIS RfC = _____ µg/m³, annual Date _____
2. Cal REL = _____ µg/m³, annual Date _____
3. IRIS [1] RfD = _____ µg/kg/day × (70/20) = _____ µg/m³, annual Date _____
4. Mich ITSL = _____ µg/m³, _____ averaging period Date _____
5. TLV NIOSH = _____ µg/m³ × 0.01 = _____ µg/m³, 8-hour Date _____
6. RTECS [1] _____ = _____ µg/m³, annual Date _____
 (describe calculation from Reg 5.20, sections 4.6 - 4.10)
7. Default 0.004 µg/m³

[1] To use data based upon an oral route of exposure, the District must make an affirmative determination that data are not available to indicate that oral-route to inhalation-route extrapolation is inappropriate.

III. De minimis calculations

1. Carcinogen BAC_C _____ µg/m³ × 0.54 = _____ lb/hour
 BAC_C _____ µg/m³ × 480 = _____ lb/year
2. Chronic Noncancer Risk _____ (averaging period)
 BAC_{NC} _____ µg/m³ × F factor = _____ lb/(avg period)

BAC averaging period	F factor for avg period			
	Annual	24 hour	8 hour	1 hour
Annual	480			0.54
24 hours		0.12		0.05
8 hours			0.02	0.02
1 hour				0.001

[Regulation 5.22, table 1]

Prepared by _____ Date _____

Attachment B – Maximum Achievable Control Technology (MACT) Requirements**40 CFR 63 Subpart III – Surface Coating of Automobiles and Light Duty Trucks**S1. **Standards** (Regulation 2.16, section 4.1.1)**HAPs**

a. The permittee shall comply with one of the following HAPs limits:

- i. **0.60 lbs HAPs/GACS on a calendar month basis:** E-Coat, guidecoat (primer), topcoat, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations in the paint shop. (40 CFR 63.3091(a))
- ii. **1.10 lbs HAPs/GACS on a calendar month basis:** guidecoat (primer), topcoat, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations in the paint shop. (40 CFR 63.3091(b))

The permittee may choose to comply with the emission limit specified by S1.a.ii. only if E-Coat meets either of the following requirements. (40 CFR 63.3092)

- 1) Each individual material added to E-Coat contains no more than 1.0 percent by weight of any organic HAP and no more than 0.10 percent by weight of any OSHA-defined carcinogenic organic HAP; or, (40 CFR 63.3092(a)(1)(2))
- 2) The emissions from all E-Coat bake ovens are captured and ducted to the oven thermal oxidizer which achieves a minimum destruction efficiency of at least 95 percent (by weight). (40 CFR 63.3092(b))

- iii. **0.01 lbs HAPs per lb of coating on a calendar month basis** for sealers, deadeners and adhesive materials that are not components of glass bonding systems. (40 CFR 63.3091(c))

b. The permittee shall develop and implement a work practice plan to minimize the organic HAP emissions from the storage, mixing and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations for which an emission limit has been established above. The work practice plan must specify practices and procedures to ensure that, at a minimum, the following elements are implemented consistent with the requirements of 40 CFR 63.3094. (40 CFR 63.3094)

- i. All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.
 - ii. The risk of spills of organic-HAP containing coatings, thinners, cleaning materials, and waste materials must be minimized.
 - iii. Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
 - iv. Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
 - v. Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
 - vi. Organic HAP emissions from cleaning and from purging of equipment associated with all coating operations subject to emission limits in 40 CFR 63.3091(a), (b) and (c) must be minimized by addressing:
 - 1) Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i);
 - 2) Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii);
 - 3) Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii);
 - 4) Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv);
 - 5) Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v);
 - 6) Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi);
 - 7) Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii);
 - 8) Additional housekeeping measures pursuant to 40 CFR 63.3094(c)(1)(viii).
 - vii. The permittee shall comply with the applicable work practice plans at all times. (40 CFR 63.3100(c))
 - viii. The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the US EPA in accordance with 40 CFR 63.6(g). (40 CFR 63.3100(c), 40 CFR Subpart PPPP 63.4493(b), and (c)), (40 CFR 63.3094(d))
- c. Revisions to the work practice plan likewise do not represent revisions to the facility's Title V Permit. Copies of the current work practice plan and any earlier plan developed within the past five years are required to be made available for inspection and copying by the LMAPCD upon request. (40 CFR 63.3094)(e) and (f))
 - d. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall meet the operating limits specified in

Table 1 of 40 CFR 63 Subpart IIII as identified below. The operating limits in Table 1 apply to the emission capture and add-on control systems on the coating operations. The permittee must establish the operating limits during the performance test according to the requirements in 40 CFR 63.3167. The operating limits shall be met at all times after they are established, except for periods of startup, shutdown and malfunction. (40 CFR 63.3093(b), 40 CFR 63.3100(b), (d) and Table 1)

Add-On Control Device	Operating Limit
Thermal Oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3167(a).
Concentrators, Including Zeolite Wheels and Rotary Carbon Adsorbers	The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(e).
Emission Capture System	The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.3167(f).

S2. Monitoring (Regulation 2.16, section 4.1.1)

- a. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall develop and implement a written startup, shutdown and malfunction plan (SSMP) in accordance with 40 CFR 63.6(e)(3) and submit to the District. This plan must address the startup, shutdown and corrective actions in the event of a malfunction of any emission capture system or add-on control device upon which compliance with any of the emission limits above depends. The SSMP must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. (40 CFR 63.3100(f))
- b. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall operate and maintain all affected emission units including any emission capture system or add-on control device upon which compliance with any of the emission limits above. At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control

practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.3100(d) and 63.6(e)(1)(i))

- c. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall maintain a log detailing the operation and maintenance of any emission capture system, add-on control device, and continuous parameter monitor upon which compliance with any of the emission limits above depends. The log shall cover the period between the compliance date specified in 40 CFR 63.3083 and the date when the initial emission capture system and add-on control device performance tests have been completed, as specified in 40 CFR 63.3160. (40 CFR 63.3100(e))

S3. **Recordkeeping** (Regulation 2.16, section 4.1.1)

Records required in this section shall be maintained on file for a period of five years. (40 CFR 63.3131) The permittee shall maintain, at a minimum, the following records as of the applicable compliance date:

- a. A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart III and the documentation supporting each notification and report. (40 CFR 63.3130(a))
- b. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP for each coating, thinner and cleaning material, the density for each coating and thinner, and the volume fraction of coating solids for each coating. (40 CFR 63.3130(b))
- c. Monthly records of the following:
 - i. For each coating or thinner used in E-Coat, guidecoat (primer), topcoat, glass bonding primer, and glass bonding adhesive operations plus all coatings and thinners, the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids. (40 CFR 63.3130(c)(1) and (2))

- ii. For each deadener material, and NGB Sealers and Adhesives used, the mass used in each month and the mass organic HAP content. (40 CFR 63.3130(c)(3))
 - iii. Calculations of the organic HAP emission rate for E-Coat, guidecoat (primer), and topcoat in pounds per gallon of applied coating solids. If permittee chooses to comply with the option identified in S1.ii, a record of the weight fraction of each organic HAP in each material added to E-Coat. These calculations and records must include raw data, algorithms, and intermediate calculations. If the “Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,” EPA-450/3-88-018 (Docket ID No. OAR-2002 0093 and Docket ID No. A-2001-22), is used, all data input to this protocol must be recorded. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. (40 CFR 63.3130(c)(4))
 - iv. To demonstrate continuous compliance with the applicable emission limit in Specific Conditions S1.a.i or S1.a.ii, the organic HAP emission rate for each compliance period determined must be equal to or less than the applicable emission limit in Specific Conditions S1.a.i or S1.a.ii. A compliance period consists of 1 month. Each month after the end of the initial compliance period is a compliance period consisting of that month. You must perform the calculations on a monthly basis. (40 CFR 63.3163 and 40 CFR 63.3173)
 - v. Calculation of the average monthly mass organic HAP content in pounds per pound of coating, separately for deadener materials and NGB Sealers and Adhesives. (40 CFR 63.3130(c)(6)),
 - vi. To demonstrate continuous compliance, the mass average organic HAP content for each compliance period, must be less than or equal to the applicable emission limit in Specific Condition S1.iii. A compliance period consists of 1 month. Each month after the end of the initial compliance period is a compliance period consisting of that month. (40 CFR 63.3152)
 - vii. The name, volume, mass fraction organic HAP content and density of each cleaning material used. (40 CFR 63.3130 (d) - (f))
- d. Any additional records pertaining to deviations; startup, shutdown or malfunctions; emission capture systems; performance testing; capture and control efficiency determinations; capture and control operating limits; transfer efficiency determinations; and work practice plans for any emission capture system or add-on control device upon which compliance with any of the emission limits, pursuant to 40 CFR 63.3130(g) through (n). (40 CFR 63.3130(g) – (n))
- i. Records pertaining to the design and operation of control and monitoring systems for any emission capture system or add-on control device upon

which compliance with any of the emission limits must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors. (40 CFR 63.3130(o))

- ii. The permittee shall compile all required records and complete all required calculations in a format acceptable to the Louisville Metro Air Pollution Control District and make them available by the end of the calendar month following each compliance period unless otherwise specified in any monitoring/recordkeeping condition.
- iii. The permittee may rely upon the results of capture, destruction or transfer efficiency tests that have been previously conducted upon written approval from the District. Any such previous tests must meet the criteria identified in 40 CFR 63.3160(c)(1) through (3). (40 CFR 63.3160)(c))
- iv. The permittee shall install, operate and maintain each continuous parametric monitoring system in accordance with the applicable provisions of 40 CFR 63.3168. (40 CFR 63.3168)
- v. The permittee shall demonstrate continuous compliance with the operating limits specified in Table 1 to Subpart III of Part 63 for any emission capture system or add-on control device upon which compliance with any of the emission limits in the above table depends, pursuant to 40 CFR 63.3163 and 40 CFR 63.3173 using the method(s) described below: (40 CFR 63.3163(c), 40 CFR 63.3173 and Table 1)

Add-On Control Device:	Operating Limit:	Continuous Compliance Demonstration Method
Thermal Oxidizer	The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to 40 CFR 63.3167(a).	<ul style="list-style-type: none"> a. Collect the combustion temperature data according to 40 CFR 63.3168(c); b. Reduce the data to 3-hour block averages; and c. Maintain the 3-hour average combustion temperature at or above temperature limit.
Concentrators, Including Zeolite Wheels and Rotary Carbon Adsorbers	The average desorption gas inlet temperature in any 3-hour period must not fall below the limit established according to 40 CFR 63.3167(e).	<ul style="list-style-type: none"> a. Collect the temperature data according to 40 CFR 63.3168(f); b. Reduce the data to 3-hour block averages; and c. Maintain the 3-hour average temperature at or above the temperature limit.
Emission Capture System	The average gas volumetric flow rate or duct static pressure in each	a. Collecting the gas volumetric flow rate or duct static pressure

Add-On Control Device:	Operating Limit:	Continuous Compliance Demonstration Method
	duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.3167(f). This applies only to capture devices that are not part of a PTE that meets the criteria of §63.3165(a) and that are not capturing emissions from a downdraft spray booth or from a flashoff area or bake oven associated with a downdraft spray booth.	for each capture device according to §63.3168(g); b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit.

- vi. For any coating operation(s) for which HAP emission reductions due to the use of add-on control equipment are relied upon to demonstrate compliance with the emission limits above, the permittee shall monitor or secure the valve or closure mechanism controlling each bypass line for each capture system upon which compliance with any of the emission limits in the table above depends in a non-bypass mode such that the valve or closure mechanism cannot be opened without creating a record that it was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the following: (40 CFR 63.3168(b)(1))
 - 1) Flow control position indicator requirements pursuant to 40 CFR 63.3168(b)(1)(i);
 - 2) Car-seal or lock-and-key valve closures requirements pursuant to 40 CFR 63.3168(b)(1)(ii);
 - 3) Valve closure monitoring requirements pursuant to 40 CFR 63.3168(b)(1)(iii);
 - 4) Automatic shutdown system requirements pursuant to 40 CFR 63.3168(b)(1)(iv).

- vii. If any bypass line is opened, a description of why the line was opened and the length of time it remained open must be included in the semi-annual compliance reports required in 40 CFR 63.3168(b). (40 CFR 63.3168(b)(2))

- viii. For all thermal oxidizers and catalytic oxidizers, you must meet the requirements for each gas temperature monitoring device. (40 CFR 63.3168(3))

- 1) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owner manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading with 30 degrees Fahrenheit of the process temperature sensor reading. (40 CFR 63.3168(3)(v))
- 2) At least monthly, inspect components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion. (40 CFR 63.3168(3)(vii))

S4. Reporting (Regulation 2.16, section 4.1.1)

- a. The permittee shall submit applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), as specified in 40 CFR 63.3110. (40 CFR Part 63, Subparts A and IIII)
- b. The permittee shall submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (9) as specified in 40 CFR 63.3120. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (a)(2) in 40 CFR 63.3120. (40 CFR 63.3120(a))
- c. For any emission capture system or add-on control device upon which compliance with any of the emission limits in the above table depends, for which a startup, shutdown, or malfunction occurs during the quarterly reporting period, the permittee shall submit a SSMP report as specified in 40 CFR 63.3120(c). (40 CFR 63.3120(c), 40 CFR 63.10(d))

S5. Testing (Regulation 2.16, section 4.1.1)

- a. The permittee shall perform the applicable performance tests and compliance demonstrations in accordance with 40 CFR 63.3150-3152, 40 CFR 63.3160-3161, 40 CFR 63.3163-3168, 40 CFR 63.3170-3171, and 40 CFR 63.3173. (40 CFR Part 63, Subpart IIII)
- b. The permittee shall determine the mass fraction of each organic HAP for each material used according to the procedures established under 40 CFR 63.3151(a)(1) through (5). The permittee may use US EPA Method ALT-017 as an alternative for any material used, after demonstrating that its use as an alternative test methodology for that material, has been approved by the US EPA pursuant to the requirements of 40 CFR 63.3151(a)(3) and 40 CFR 63.7. (40 CFR 63.7, 40 CFR 63.3151)
- c. For any emission capture system or add-on control device upon which compliance with any of the emission limits in the above table depends, the permittee shall

submit all performance test reports for emission capture systems and add-on control devices, and reports of transfer efficiency tests no later than 60 days, as required by 40 CFR 63.3120(b). (40 CFR 63.3120(b))

Attachment C – Ford Louisville Assembly Plant Compliance Assurance Monitoring (CAM) Plan**PROCESS/OPERATIONAL RESTRICTION(S)**

1. Each thermal oxidizer used to control VOC emissions from the coating operations shall be operated to maintain a combustion chamber temperature of no more than 50 degrees Fahrenheit below the average combustion temperature during the most recent acceptable performance test and shall have a minimum design retention time of 0.5 seconds. The minimum temperature requirement may be based upon a 3 hour average. (40 CFR 64.6(c)(1)(i), (ii))
2. Each carbon adsorber and fluidized bed concentrator used to control VOC emissions from the coating operations shall be operated to maintain a desorption gas inlet temperature of no more than 15 degrees Fahrenheit below the average desorption gas inlet temperature during the most recent acceptable performance test. The minimum temperature requirement may be based upon a 3 hour average. (64.6(c)(1)(i),(ii))

MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

1. Temperature measurements of the thermal oxidizer combustion chamber shall be made at least once every 15 minutes and recorded during operation of the associated coating operations. (64.6(c)(1)(i),(ii))
2. Temperature measurements of the concentrator desorption gas inlet shall be made and recorded at least once every 15 minutes during operation of the associated coating operations. (64.6(c)(1)(i),(ii))
3. If coating operations can continue operating during a control device bypass, the bypass shall be monitored such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was open and the length of time the bypass was open during operation of the associated coating operations shall be kept on file. (64.3(a)(2))
4. The CAM operating and maintenance (O&M) plan shall be developed, and implemented. The CAM O&M plan shall be updated as necessary to reflect any necessary changes. All records and activities associated with the O&M plan shall be kept on file for a period of at least five years. (64.6(c)(1)(i),(ii), 64.7(e))

REPORTING

Each quarterly report for monitoring and deviations shall identify the number, duration and cause of any excursions of these requirements and the corrective actions taken. If there were no excursions in the reporting period, then this report shall include a statement that there were no excursions. (40 CFR 64.9(a)(2)(i))

OTHER REQUIREMENTS

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 during which the average fails to meet the specified temperature requirements.
- b. A monitoring excursion is defined as a failure to properly monitor as required.
- c. A monitoring excursion can also be defined as failure to properly implement and/or maintain the O&M plan.

Elements of an O&M Plan –CAM

General – Keep records of maintenance inspections which include the dates of the inspections and the dates and reasons for repairs if made. The following items shall be addressed in an O&M Plan for each respective control device used to demonstrate compliance with applicable VOC emissions limits.

RTOs

- Validation of operation of each thermocouple a minimum of once every 12 months or thermocouple replacement.
- *Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months, or
- *Perform an inspection of the valve seals condition once every 18 months and verify valve timing/synchronization through visual observation (or through an alarm system)_once every 18 months.

Carbon Adsorber

- Validation of operation of each thermocouple a minimum of once every 12 months or thermocouple replacement.
- Perform semi-annual observations to confirm that the carbon adsorber is rotating (if a rotary carbon adsorber) and that the desorption fan is operating.
- *Perform internal observation of adsorbent materials for contamination and erosion a minimum of once every 18 months.
- Observe and record the pressure drop across the carbon adsorber a minimum of once every calendar quarter.

* This requirement is satisfied if a performance test (i.e., stack test) has been performed.

**Attachment D – Processes Added/Removed/Modified from Compliance
Ford Motor Company Louisville Assembly Plant**

This sheet covers the period from _____ to _____

Emission Point (Note 1)	Equipment Description (Note 1)	Change Category (Note 1)	Equipment Action (Note 2)	Date of Action (Note 3)

- Note 1: Description of equipment being added/removed/modified including emission point identification and category of change. This log shall include any equipment/process that is added or removed from the calculation of annual emissions.
- Note 2: Any equipment being added, removed, or modified from the emissions must be listed.
- Note 3: If equipment is being added, list date of commencement of operation (including startup). If equipment is being removed, list date of removal from installation.

Attachment E – Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers that are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Tentative test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. The type and manufacturer of the control equipment, if any;
- 16. The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures
 - If audit samples are required for this test method, audit sample provider and number of audit samples to be used
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested for outlet and additionally for inlet if required using Appendix A-1 to 40 CFR Part 60;
 - Method 1 if stack diameter is >12"
 - Method 1a if stack diameter is greater than or equal to 4" and less than 12"
 - Alternate method of determination for <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5 allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.
- 21. The Stack Test Review fee shall be submitted with each stack test protocol.