Louisville Metro Air Pollution Control District
850 Barret Avenue
Louisville, Kentucky 40204-1745

PAL Construction Permit

Permit No.: 30043-11-C(R1) Plant ID: 0073

Effective Date: 5/17/2012 Expiration Date: 5/31/2022
Revised Date: xx/xx/2015

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

Ford Motor Company – Kentucky Truck Plant
3001 Chamberlain Lane
Louisville, Kentucky 40241

The applicable procedures of District Regulation 2.03 and 2.05 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.

Application No.: 57268 Application Received: 07/15/2013

Permit Writer: Shannon Hosey

Date of Public Notice: 10/11/2015

Date of proposed permit: 10/11/2015

{Manager1}
Air Pollution Control Officer
{date1}

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PAL Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Type	Page No.	Description
N/A	30043-11-C	05/17/2012	02/22/2012	Initial	Entire Permit	PAL, STAR TAC requirements, RO change, construction permits 63-04-C, 65-04-C, 118-04-C, 119-04-C, 210-05-C, 211-05-C, 157-07-C, 158-07-C, 479-08-C, 567-08-C and 583-08-C
R1	30043-11-C(R1)	xx/xx/15	10/11/15	Significant Revision	Entire Permit	Incorporate PSD construction permit TV-13-1016(R1)

Abbreviations and Acronyms

AP-42	- AP-42, *Compilation of Air Pollutant Emission Factors*, 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.

This permit covers only the provisions of Kentucky Revised Statutes Chapter 77 Air Pollution Control, the regulations of the Louisville Metro Air Pollution Control District (District) and, where appropriate, certain federal regulations. The issuance of this permit does not exempt any owner or operator to whom it has been issued from prosecution on account of the emission or issuance of any air contaminant caused or permitted by such owner or operator in violation of any of the provisions of KRS 77 or District regulations. The permit contains general permit conditions and specific permit conditions. General conditions are applicable unless a more stringent requirement is specified elsewhere in the permit.

General Conditions

G1. The owner or operator of the affected facility covered by this permit shall notify the District of any process change, equipment change, material change, or change in method or hours of operation. This requirement is applicable to those changes (except equipment changes) that may have the potential for increasing the emission of air contaminants to a level in excess of the applicable limits or standards specified in this permit or District regulations.

G2. The owner or operator shall obtain new or revised permits from the District when:
(See District Regulation 2.16 for Title V sources. See District Regulation 2.17 for FEDOOP sources. See District Regulation 2.03 for other sources.)

a. The company relocates to a different physical address.
b. The ownership of the company is changed.
c. The name of the company as shown on the permit is changed.
d. Permits are nearing expiration or have expired.

G3. The owner or operator shall submit a timely application for changes according to G2. For minor sources only, the District does not require application for permit renewal. The District automatically commences the process of permit renewal for minor sources upon expiration. Timely renewal is not always achievable; therefore, the company is hereby authorized to continue operation in compliance with the latest District permit(s) until the District issues the renewed permit(s).

G4. The owner or operator shall not be authorized to transfer ownership or responsibility of the permit. The District may transfer permits after appropriate notification (Form 100A) has been received and review has been made.

G5. The owner or operator shall pay the required permit fees within 45 days after issuance of the SOF by the District, unless other arrangements have been proposed and accepted by the District.

G6. This permit allows operation 8,760 hours per year unless specifically limited elsewhere in this permit.

G7. The owner or operator shall submit emission inventory reports as required by Regulation 1.06.

G8. The owner or operator shall timely report abnormal conditions or operational changes, which may cause excess emissions as required by Regulation 1.07.

G9. 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.

G10. If a change in the Responsible Official (RO) occurs during the term of this permit, the owner or operator shall provide written notification (Form 100A) to the District within 30 calendar days of the date the RO change occurs.

Kentucky Truck Plant, Ford Motor Company Plant-wide Applicability Limits

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	Prevention of Significant Deterioration of Air Quality	(aa)(1) through (15)

Emission Unit Summary

Emission Unit	Equipment Description
U-00	Natural Gas Boilers
U-11	Volatile Organic Liquid Storage Tanks
U-12	Plant-wide Product Fueling and Plant Vehicle Refueling
U-15	Phosphate System
U-16	E-Coat Operation
U-17	Sealer
U-18	Guidecoat Operation
U-19	Topcoat/Final Repair Operations
U-20	Black-Out and Wax
U-22	Cleaning Operations
U-28	Aluminum Scrap System
U-30/U-33	Two (2) Windshield Installation Operations
U-32	Blank Wash Process Operation
U-34	Natural Gas-Fired Combustion Equipment - Non-Boiler
U-35	Emergency Generators
U-50- Pretreatment System	Receives white-metal bodies from Body shop, cleans the metal with detergent solutions, applies a pretreatment coating in a large dip tank, and rinses excess material from the body prior to e-coat.
U-51 – E-Coat System	Receives bodies from pretreatmentand applies an electro-deposited anti-corrosion coating to the body in a large dip tank. Rinses excess material from the body and sends it to the e-coat oven to be cured. Exhaust from the e-coat oven is directed to an RTO for VOC control. After the oven, the surface is lightly sanded to remove small surface defects. Particulates from this operation are controlled by dry air filters in the exhaust plenum.
U-53 – Sealer	Body seams are closed by manual application of a variety of sealing materials and the sealer is partially cured in the sealer-gel oven. VOCs are emitted from these operations, but they are emitted to the atmosphere without control.
U-54 – PVC Antichip	A PVC material is robotically sprayed on the lower rocker panel of the vehicle to prevent body damage from road debris. Particulate emissions are controlled with dry air filters.
U-55 – 3-Wet System Guidecoat	This is the first section of the paint spraybooths where a guidecoat to provide a smooth surface and promote adhesion between the e-coat and topcoat materials is applied robotically. The application is 100% robotic, however a manual application station is provided to add backup material when required or take over for robot malfunctions. Air is recirculated within this portion of the booth, with a portion bled off to be

Emission Unit	Equipment Description
	exhausted through a carbon adsorption system and, ultimately, a regenerative thermal oxidizer. Particulate control is through an air-suspended limestone bed under the booth.
U-56 – 3-Wet Topcoat System	This is the second section of the paint spraybooths where a colored base-coat and clear or tinted clearcoat are applied over the still wet guidecoat. The application is 100% robotic, however a manual application station is provided after both the basecoat and clearcoat sections to add backup material when required or take over for robot malfunctions. Air is recirculated within this portion of the booth, with a portion bled off to be exhausted through a carbon adsorption system and, ultimately, a regenerative thermal oxidizer. Particulate control is through an air-suspended limestone bed under the booth. After the paint is applied, the vehicle body is cured in the paint oven. Exhaust from this oven is directed to the same RTO as that used to abate the e-coat oven. The "Paint Kitchen" where paint is stored, cut with solvents to the proper viscosity, and circulated to the spraybooths is also part of this emission unit. The spot repair area, where small paint defects found after the painting process are corrected, is after the oven and also included in this emission unit.
U-58 – Blackout	A black coating material is sprayed into the rear wheel wells of the body for cosmetic purposes. VOC emissions are negligible and not controlled. PM emissions are controlled by dry plenum air filters.
U-59 – Purge and Clean	This emission unit covers the processes of equipment purging of residual paint between color changes and cleaning of the equipment. Storage of the materials used to complete these tasks is covered in another emission unit.
U-60 – Storage tanks	Two (2) 6,000 gallon storage tanks used to store bulk zirconium oxide and bulk cleaner materials for the pretreatment system and a tank used to hold purge solvent before use and the tank which holds used solvent before it is picked up for recycling.

Specific Conditions

S1. **Plant-wide Applicability Limit (PAL) Standards** (Regulation 2.05, section 1 & Regulation 2.03)

a. Under the provisions of this PAL, 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 (ton per year limits in the table below) are not exceeded.

Plant-wide Applicability Limits		
Pollutant	**Tons/Year[1] (Before Construction Permit TV-13-1016(R1) Commences Operation)**	**Tons/Year[4] (After Construction Permit TV-13-1016(R1) Commences Operation)**
VOC[2]	920.35	1344.75
PM	50.5	50.5
PM_{10}[3]	50.5	50.5
$PM_{2.5}$	45.05	45.05
NO_X	99.0	99.0
SO_2	39.58	39.58
CO	180.66	180.66
GHG CO_2e	-	180,661

b. Operational and Equipment Modifications

1) 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 amendment from the permitting authority pursuant to Regulation 2.03 as long as the PAL is not exceeded.

2) 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 any given time. Attachment A, or equivalent forms may be used for this purpose.

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1 Represents a 12-month rolling total

2 VOC emissions will increase from 920.35 tons per year to 1344.75 tons per year when construction permit TV-13-1016(R1) commences operation.

3 The PM_{10} limit is considered a limit on PM.

3) If the permittee wishes to make physical or operational changes that are not deemed consistent with the physical or operations changes listed in this construction permit and are not exempt form the construction permit rule, then the permittee must first apply for and obtain a construction permit or amendment.

c. Notification of Actual Construction of Change:

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

1) Detailed description of the physical or operational change including the effect on existing equipment;

2) A plant layout diagram with representation of existing equipment and physical or operational changes;

3) A schedule of construction activities related to the change;

4) A statement of applicability for any New Source Performance Standard, National Emission Standard of Hazardous Air Pollutants and/or state regulations not identified as core requirements in the operating permit;

5) An emissions calculation sheet for the change;

6) A statement of verification that the physical or operational change will not result in plant-wide emissions that exceed the limitations stated in Specific Condition S1.a; and

7) 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 submitted under S1.c. such as descriptions of changes and associated applicability determination shall become an enforceable part of the construction permit upon receipt by the permitting authority.

e. The permitting authority may disapprove any activity that has not demonstrated to the satisfaction of APCD to be related to the changes. At the time, the permittee shall cease construction of the change submitted under S1.c. 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 permitting authority at least ten days prior to the actual start-up or operation of any change listed in this PAL permit. The notification shall contain the following:

1) Reference to the notification of actual construction including date of notification and brief description of change;

2) Verification that the physical or operational change was completed as described in the original notification; and

3) Scheduled date operations will be commenced.

g. It is a violation of this construction permit for the owner or operator to construct, modify or operate not in accordance with the notification of Specific Condition S1.f.

h. The notification letter identified in c. and f. above is not required for sources that are otherwise exempt from the requirement to obtain a permit or are included in the list of insignificant sources in the Appendix to the Title V Operating Permit.

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. Reopening of the Construction Permit:

1) The permitting authority may reopen the construction permit to accomplish the following actions:

i. Revise the PAL to reflect an increase in the PAL as outlined in Specific Condition S3.q.
ii. Reduce the PAL to reflect newly applicable Federal and/or State requirements with compliance dates after the issuance of this construction permit.
iii. Reduce the PAL if the permitting authority determines that a reduction is necessary to avoid causing or contributing to a National Ambient Air Quality Standard or Prevention of Significant Deterioration increment violation, or to an adverse impact on air quality.

2) All reopenings that increase the PAL level are required to be placed on public notice for at least a thirty (30) day period for submittal of public comment.

k. Permit Application Submission Requirements:

1) If the permittee chooses to renew this PAL, the permittee shall submit a complete application between six and eighteen months prior to the expiration of the PAL. This PAL shall not expire until a revised PAL

permit is issued if a complete application is received by Louisville Metro Air Pollution Control District within the time frame specified.

2) The PAL limits for each regulated pollutant will remain in effect until a revised permit is issued by the District.

l. PAL Renewal Requirements:

1) A complete application shall consist of written documentation and/or calculations for the following items:

i. A proposed PAL level;
ii. A list of all emissions units with applicable Federal or State requirements;
iii. The potential emissions of all current equipment;
iv. Identification of the baseline period;
v. Baseline actual emissions; and
vi. A compliance plan for the proposed PAL.

2) The permitting authority will have the final authority to set the new *plant-wide* emissions limitation based on the following guidelines:

i. If the baseline actual emissions at the time of renewal are equal to or greater than eighty percent of the PAL, the PAL may be renewed at the same level.
ii. The PAL may not be set at a level that is greater than the potential to emit of the entire facility.
iii. The PAL shall be adjusted to account for any applicable State or Federal requirement with a compliance date that occurs during effective period of this PAL.
iv. A PAL level higher than the current PAL level cannot be approved unless otherwise approved through Specific Condition S3.q.

3) Any request to renew the PAL level is required to be placed on public notice for at least a thirty (30) day period for submittal of public comment.

m. A complete application shall consist of a proposed allowable emission limitation for each emissions unit (or each group of emissions units) by distributing the PAL allowable emissions for the facility among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, such distribution shall be made as if the PAL had been adjusted.

n. 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.

o. The owner or operator shall continue to comply with any State or Federal applicable requirements that may have applied either during the PAL effective period or prior to the PAL effective period.

p. 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.

q. Increase of the PAL during the Effective Period:

If the owner or operator wishes to alter this construction permit to allow the facility to emit more than the limit of any one of the regulated pollutants, the owner or operator shall submit a complete application to request an increase in the PAL meeting all the requirements for a major modification.

1) A complete application shall consist of written documentation and/or calculations to accomplish the following items:

i. Identify the emissions units contributing to the increase in emissions so as to cause the emissions to equal or exceed the PAL.
ii. Determine the Best Available Control Technology (BACT) equivalent controls for each emission unit using current technology.
iii. Demonstrate that the sum of the baseline actual emissions of emissions units, plus the sum of the baseline actual emissions of the new or modified emissions units exceeds the PAL.
iv. Comply with the provisions of a current BACT analysis for all emissions unit(s) identified in Specific Condition S3.q.1)i.

2) The revised PAL level shall be placed on public notice for at least a thirty (30) day period for submittal of public comment.

r. Operational Requirements from Previous Construction Permits:

1) Upon request by the Air Pollution Control District, the owner or operator shall supply to the Air Pollution Control District a drawing showing rooftop locations of current process exhaust stacks.

2) Each stack must be identified by the associated source operation name and a short code that the owner or operator chooses.

3) There must be a unique code for all stacks associated with each new emission unit.

S2. **PAL Monitoring and Record Keeping Requirements** (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 ten 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:

1) A copy of the PAL permit application and any applications for revisions to the PAL;

2) Each annual certification of compliance pursuant to Title V and the data relied on in certifying compliance; and

3) A copy of any new or modified emission units that are 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.

1) Emissions calculations to demonstrate compliance with the PAL include VOC, $PM/PM_{10}/PM_{2.5}$, CO, SO_2, and NOx emissions from startups, shutdowns, and malfunctions.

2) The permittee shall monthly calculate and record the 12 month total emissions of VOC, $PM/PM_{10}/PM_{2.5}$, CO, SO_2, and NOx.

3) Compliance with applicable emission rates for the E-coat, Guidecoat 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.

4) To demonstrate compliance with the PAL emission limits, the permittee may use either of the following or any other approved method:

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

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

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

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

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.

5) The permittee shall keep documentation of any emission factors used to demonstrate compliance with the PAL. At the time of submittal, emission factors must be obtained from the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, the most recent stack performance test results, a mass balance approach using the Material Safety Data Sheets (MSDS) of all materials, and/or by a method approved by the permitting authority.

6) The permittee shall keep documentation of any overall control efficiencies used to demonstrate compliance with the PAL. 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 tests, the owner or operator shall maintain an operation and maintenance plan on site at all times. A table of contents of the plan shall be submitted to the permitting authority within 5 years of receipt of the performance test reports required of Specific Condition S4.c. The plan should be detailed, specific to the owner or operator and include the following information:

1) A preventative maintenance program for avoidance of excess emissions which shall include all maintenance activities, with inspection schedule, repair actions, and replacements inventory.

2) A range of operating conditions and outlet variables for normal operation.

3) 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.

4) 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 operated in accordance with the operating requirements contained in the TV-13-1016(R1) and 150-97-TV(R1) until all of the permit conditions are consolidated.

g. Thermal Oxidizer Requirements:

1) 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.

2) 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, and recorded.

h. Carbon Adsorber and Fluidized Bed Concentrator Requirements:

1) The owner or operator shall monitor and record 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.

2) 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 Equipment Requirements:

1) 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:

i. An impact analysis of the change on the capture efficiency;
ii. A determination of the need for a new capture efficiency test based on the impact analysis;
iii. A summary of the evaluation to be included in the Notification of Actual Construction as stated in Specific Condition S1.c.

2) Within 180 days of startup of new construction/reconstruction, 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:

i. Identifies the operating parameter(s) to be monitored to assure capture efficiency,
ii. Explains why these parameter(s) are appropriate for demonstrating ongoing compliance,
iii. Identifies the specific monitoring procedures, and
iv. 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.

3) 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.

4) 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 thermal oxidizers) for a period of 10 years which shall include the following:

i. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
ii. Maintenance activities, with inspection schedule, repair actions, and replacement, etc.

iii. 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. **PAL Reporting Requirements** (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 1st through March 31st, April 1st through June 30th, July 1st through September 30th and October 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period and include the following information:

i. The identification of owner and operator, the facility ID, and the construction permit numbers.
ii. Twelve consecutive month total plant-wide emissions (tons per year) for each month in the reporting period for each PAL pollutant.
iii. A summary of the data relied upon, including, but not limited to, any quality assurance or quality control data, in calculating the monthly and 12 consecutive month PAL pollutant emissions. A copy of the data relied upon shall be maintained on site for a minimum period of 5 years.
iv. A list of any emissions units modified or added during the preceding three-month period (including exempt and insignificant sources).
v. 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.
vi. 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 or the number determined by method included in the PAL permit.
vii. 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."

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. 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;
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. **PAL Performance Testing** (Regulation 2.05, section 1 & Regulation 2.03)

a. The owner or operator shall conduct performance tests on existing control devices in the following table and any future control devices used for compliance with the PAL in accordance with the schedule identified in item c. below.

Control Device	**Location Description**
Thermal Oxidizer	C-29 RTO
Carbon Adsorber	C-32 Carbon Adsorber
Thermal Oxidizer	C-50 RTO
Carbon Concentrator	C-51Booth Exhaust Concentrator

The owner or operator shall determine the VOC destruction and/or removal efficiencies and operating parameters of these control devices when all the processes that are controlled by these devices are in normal operation. The owner or operator shall maintain a record of the results.

b. For each capture system, the owner or operator shall:

1) 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

2) Conduct a performance test to determine the capture efficiency and establish the value or range of values for the selected operating parameter(s) when all the processes controlled by these devices are in normal operation. The owner or operator shall maintain a record of the results.

c. Within the initial 10-year term of this PAL permit and at least within 10 years of the most recent performance tests (or within the first two (2) years of the initial PAL permit issuance), the owner or operator shall:

1) Conduct performance tests to verify the operating parameters and/or control efficiencies of the C-29 RTO, C-50 RTO, C-51 Carbon Concentrator and the C-32 Carbon Adsorber;

2) Confirm the capture efficiencies of the total or partial enclosures by Specific Condition S4.b.1) or S4.b.2); and,

3) Conduct performance tests for any control device installed subsequent to the issuance of this construction permit no later than 180 days after initial start-up of the control equipment.

d. The emission testing requirements are designed to obtain representative emission testing. However, it is recognized that circumstances or other reasons may arise that would necessitate changes to the testing requirements. Therefore, upon mutual agreement between the permittee and the District, the testing requirements specified in this permit may be changed.

e. Proposed Test Plan:

A completed Proposed Test Plan must be submitted to the Air Pollution Control District, at least thirty (30) 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 testing.

f. A copy of a written report of the performance test results shall be submitted to the District within thirty (30) days of completion of any required testing, unless an extension is requested and approved by the District.

1) 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.

2) The test report is to fully account for all operational and emission parameters addressed both in the construction permit conditions as well as in any other applicable state or federal rules or regulations.

Plant-wide Applicability Limits Comments/Explanations:

1. The Plant-wide Applicability Limit(s) (PAL) are set at levels equal to the baseline determination submitted by the owner or operator and historical actual emission levels, significance levels, and PSD construction permit TV-13-1016(R1) VOC limits.

2. The PAL permit provisions (under Regulation 2.05 Prevention of Significant Deterioration of Air Quality) 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".

Insignificant Activities:

Various activities are listed as insignificant activities and are explicitly cited in the IA Table in permit 150-97-TV(R2) and in permit TV-13-1016(R1).

Attachment A:

Processes Added/Removed/Modified from Compliance
Ford Motor Company Kentucky Truck 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 emission points 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 the facility.