N0929
MANILA

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N092941393

FACILITY: Ford Motor Company - Flat Rock Assembly		**SRN / ID:** N0929
LOCATION: 1 INTERNATIONAL DR, FLAT ROCK		**DISTRICT:** Detroit
CITY: FLAT ROCK		**COUNTY:** WAYNE
CONTACT: Terence Filipiak , Environmental Manager		**ACTIVITY DATE:** 08/22/2017
STAFF: Jonathan Lamb	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: Scheduled inspection, FY 2017		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION: August 22 and September 11, 2017
REASON FOR INSPECTION: Scheduled Inspection
INSPECTED BY: Jonathan Lamb, AQD-Detroit Office
PERSONNEL PRESENT: Terry Filipiak, Environmental Manager - Ford
CONTACT PHONE NUMBER: 734-782-7797 (Mr. Filipiak)

BACKGROUND:

Ford Flat Rock Assembly Plant (FRAP) is an automobile assembly plant. The facility previously operated as AutoAlliance International, a joint venture between Ford and Mazda, until Ford took over sole ownership and operation in September 2012. FRAP is a considered a major source for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) and is subject to Title V permitting requirements. The facility is also subject to review under the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because at the time of New Source Review permitting the potential to emit of VOCs was greater than 250 tons per year.

The building area is nearly 3 million square feet and is located on 400 acres of land. The plant has the capability of stamping, assembling, and painting metal body parts; molding and painting plastic parts; and final assembly to produce a finished automobile. VOC controls, including three regenerative catalytic oxidizers (RCOs), were installed in 1997. Ford has built the Ford Mustang at this facility since 2004 and started production of the Lincoln Continental in late 2016, replacing the Ford Fusion, which ceased production at this facility in February 2016. Production is roughly split 75% Mustang/25% Continental. The facility usually operates two shifts, 6:00 AM to 2:30 PM and 5:30 PM to 2:00 AM, and has around 2,800 employees.

COMPLAINT/COMPLIANCE HISTORY:

Since starting operations in 1987, this facility has had a history of recurring odor complaints, received mainly from the subdivisions directly east of the facility/I-75 in Brownstown Township. A detailed history of the past odor issues at this facility can be found in previous inspection reports. This report will address the most recent period of odor issues beginning in 2015. AQD received 78 complaints in 2015, 23 complaints in 2016, and 34 complaints through August 2017, regarding odors from the facility. During this time period, AQD has issued a total of six violation notices for violations of Rule 901 due to nuisance odors. Violation notices were issued on the following dates: August 18, August 27, and October 19, 2015; January 28, 2016; and June 27 and August 15, 2017. Since the odor complaints are ongoing, these violations are considered unresolved at this time.

Odors have generally been described by complainants and AQD staff as "paint/solvent-type" odors, though some odors have been described as "cat urine". Based on odor studies contracted by Ford for the facility, the "cat urine" odors were determined by the company to be the result of biological activity occurring in a paint sludge pit in the plastic coating operations. The facility took corrective actions, including cleaning the sludge pit and adding a chlorine dousing system to the pit to control the bacteria. These corrective actions have appeared to help abate the "cat urine" odors from the paint sludge pit, as complaints describing this type of odor have been less frequent since the corrective actions were taken.

FRAP has also had ongoing noncompliance issues with the operation of the RCO System. Since the last full compliance evaluation on June 28, 2016, the facility was issued a violation notice on December 8, 2016, after compliance testing of the RCO System performed on October 18, 2016, failed to demonstrate compliance with either the minimum VOC destruction efficiency of 95% or maximum VOC outlet concentration of 5 ppm allowed in the facility's Renewable Operating Permit. The facility resolved this issue when compliance testing performed on March 24, 2017, demonstrated compliance with the VOC destruction efficiency and VOC outlet concentration limits. In addition to annual compliance testing, the facility also performs Outlet Concentration Monitoring (OCM)

to monitor the performance of the RCO System. The OCM testing is for performance monitoring only and is not used to demonstrate compliance.

OUTSTANDING CONSENT ORDERS:

There are no outstanding consent orders. Consent Agreement AQD No. 15-2008, issued on June 17, 2008, was terminated on August 23, 2012, with AQD Director approval.

PROCESS DESCRIPTION/CONTROLS:

The facility is split into two operations: automobile body coating and assembly ("Body"), and plastic coating ("Plastic"). Both operations run concurrently and are coordinated to produce a complete automobile on site.

Body
Exterior panels (doors, fenders, hoods, etc.) are stamped from steel coils by four hydraulic presses on site. Interior parts are delivered from outside suppliers. The panels are welded together in the body shop, creating the body of the vehicle.

The vehicles are run through a phosphate line, which cleans oil and dirt from the surface to allow better adhesion of the coatings. The vehicles are then rinsed and run through an uncontrolled drying oven (250 °F). The vehicles are then run through the e-coat tank using a "porpoise" motion, which dips the vehicle into the e-coat several times. The vehicles are again rinsed and run through a drying oven (250 °F), which is controlled by an RTO. Next, the vehicle passes through the uncontrolled Sealer Deck, where seams are sealed using both automated and manual (brush) applicators, before passing through a cure oven (350 °F) controlled by the RTO.

At this point, the primed vehicles are staged in the "gallery" before being sent through Topcoat Line A or Topcoat Line B, where primer (also called guidecoat) and topcoat (basecoat and clearcoat) are applied. Lines A and B are identical and run parallel with each other. A few years ago, the facility switched to a "3-wet coating system" for coating application: as vehicles pass through the booths, the vehicle bodies are coated with primer, then basecoat, and then clearcoat without any drying/curing stages between applications. Coatings are applied with robotic applicators, though some manual HVLP sprayers are also used. Lines A and B use a water curtain for particulate control and all emissions booth emissions are exhausted through the RCO System for control of VOC emissions. After the coatings are applied, the vehicles are run through a cure oven (350 °F), which is controlled by the RTO.

Once the vehicles pass through the cure oven, they are checked for surface defects. If the defects are "major', the vehicle is sent to the Tutone/Repair Booth (C Line), where the defects repaired using manual paint cup guns, and then cured in an oven. The Repair Booth uses mesh filters to control particulate. After the repair process is finished, or if no defects are found, the vehicles are then sent to the Blackout Booth, where a water-based blackout is applied via automated sprayers to the wheel wells. This booth is exhausted to atmosphere. The facility no longer applies wax to vehicles at this facility. The coated vehicles then go to Final Assembly.

An RCO System is used to control emissions from the Body operations. The system is made up of three RCOs (RCO A, RCO B, and RCO C) and an RTO. Each RCO has its own stack, and the RTO exhausts through the stack of RCO C.

Plastic
The plastic coating line is coordinated with the body coating line (ie, parts made on the plastic side are for cars being built on the body side), though some after-market parts are also made on the plastic side.

Front and rear bumpers/fascias are manufactured on site using four plastic injection molding machines. Once assembled, the bumpers are washed, acid-etched, and then oven dried at 200 °F. The bumpers are then coated using a "3-wet" application of a prep coat (adhesion promoter), topcoat, and clearcoat. All coatings are solvent-based. The Adhesion Promoter, Topcoat, and Clearcoat Booths all exhaust uncontrolled through the Tall Stack. After the coatings are applied, the bumpers pass through a two curing ovens (285 °F), which are controlled with a recuperative incinerator, and then go to Final Assembly. Since the last inspection, the North Plastic Line has been idled.

Note: Ford is scheduled to cease plastic production and coating operations before the end of 2017. This area of the facility will be converted to a different operation, the details of which have yet to be confirmed by the company.

Final Assembly
This is where the vehicles are completed – bumpers attached to frames, seats and windshields installed, etc. The cars are fueled on-site and are drivable.

APPLICABLE RULES/PERMIT CONDITIONS:

Ford Flat Rock Assembly is a Title V facility operating under Renewable Operating Permit (ROP) No. MI-ROP-N0929-2011a, originally issued on May 19, 2011, and revised on September 12, 2012. FRAP's ROP renewal application was received by AQD on October 29, 2015.

FRAP is also subject to the following federal regulations:

EU-Ecoat, EU-Guidecoat, EU-Topcoat, and EU-Purge are subject to the Maximum Achievable Control Technology Standards for Surface Coating of Automobiles and Light-Duty Trucks promulgated in 40 CFR, Part 63, Subparts A and IIII.

EU-Plastic and EU-Plastic Purge & Clean is subject to the Maximum Achievable Control Technology Standards for Surface Coating of Plastic Parts and Products promulgated in 40 CFR, Part 63, Subparts A and PPPP.

EU-Guidecoat and EU-Topcoat are subject to the New Source Performance Standards for Automobile and Light Duty Truck Surface Coating Operations promulgated in 40 CFR, Part 60, Subparts A and MM.

EU-Tanks is subject to the Maximum Achievable Control Technology Standards for Organic Liquids Distribution (Non-Gasoline) promulgated in 40 CFR, Part 63, Subparts A and EEEE.

EU-Ecoat, EU-Guidecoat, EU-Topcoat, at the stationary source is subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 CFR, Part 64. This emission unit has a control device and potential pre-control emissions of Volatile Organic Compounds greater than the major source threshold level.

Various natural gas-fired boilers, all with a heat capacity below 11 MMBtu/hr and exempt from the permitting requirements of Rule 201 pursuant to Rules 278 and 282(b)(i), are subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subpart DDDDD.

EU-Generators are subject to National Emission Standards for Hazardous Stationary Reciprocating Internal Combustion Engines as promulgated in 40 CFR Part 63, Subpart ZZZZ.

Records from January 2016 through June 2017 were reviewed for the purpose of determining compliance. Some of these records can be found in the orange facility file.

ROP No. MI-ROP-N0929-2011a, applicable conditions:

C. EMISSION UNIT CONDITIONS

EU-Plastic Purge & Clean – Use of purge and cleaning solvents within the plastic parts coating operation (EU-Plastic).

I. Emission Limits
1. IN COMPLIANCE. VOC emissions from EU-Plastic Purge & Clean were below the permit limit of 118.2 tons per 12-month rolling time period. The highest 12-month rolling total VOC emissions during the compliance period was 25 tons in the 12-month rolling time period ending in April 2016; the 12-month rolling total VOC total in June 2017 was 21 tons.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content, water content, and density of all solvents is calculated by the manufacturer using results of Method 24 testing.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. The facility maintains the following information on a monthly basis for EU-Plastic Purge & Clean:

a. Gallons (with water) of each VOC-containing purge and clean-up solvent
b. Gallons (with water) of each VOC-containing purge and clean-up solvent reclaimed.
c. VOC content (with water) in pounds per gallon of each purge and clean-up solvent used.
d. VOC mass emission calculations determining the monthly emission rate in the tons per calendar month, in accordance with the method outlined in Appendix 7.
e. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month, in accordance with the method outlined in Appendix 7.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Stamping Shop – Stamping shop operations

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. Exhaust gases from EU-Stamping Shop are not directly discharged to the ambient air. All stamping operations are exhausted inside the building.

EU-Phosphate – Pretreatment of the vehicle surface to prepare it for electrocoating.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1, 2, and 3. IN COMPLIANCE. According to facility documentation, stacks SV345, SV390, and SV392 meet permit specifications.

EU-Ecoat – Electrocoating of vehicle bodies

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Cure oven portion of EU-Ecoat is operated with the regenerative thermal oxidizer installed, maintained, and operated in a satisfactory manner. This includes maintaining of a minimum VOC destruction efficiency of 95% or an average outlet VOC concentration of less than or equal to 5 ppm (as propane) for the RCO Control System. See FG-Facility, SC V.2.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content, water content, and density of the resin, pigment, and additives, as added to the Electrocoat tank is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.

3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1, 2, and 3. IN COMPLIANCE. According to facility documentation, stacks SV355, SV389, and SV103 meet permit specifications.

EU-NGB Adhesives & Sealers – Sealer and adhesive materials used in the body construction processes.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of each sealer and adhesive, as applied, is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Deadeners – Sound deadener material sprayed into body cavity areas of the vehicle.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of each sound dampening material, as applied, is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Glass Install – Adhesives, primers, sealers, and solvents used for windshield and rear window installation.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of each glass adhesive material, as applied, is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1, 2, 3, and 4. IN COMPLIANCE. According to facility documentation, stacks SV601, SV602, SV603, and SV604 meet permit specifications.

EU-Guidecoat – Application of guidecoat coating, including anti-chip primer, undercoating, and black-out.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. EU-Guidecoat is operated with the RCO Control System installed, maintained, and operated in a satisfactory manner. This includes maintaining of a minimum VOC destruction efficiency of 95% or an average outlet VOC concentration of less than or equal to 5 ppm (as propane) for the RCO Control System. See FG-Facility, SC V.2.
2. IN COMPLIANCE. Water wash particulate controls for the spray booths of EU-Guidecoat are installed,

maintained, and operated in a satisfactory manner, including the monitoring and recordkeeping requirements of FG-Facility, SC VI.2.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of all coatings and materials used is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1 through 10: IN COMPLIANCE. According to facility documentation, stacks SV304, SV305, SV306, SV307, SV308, SV309, SV313, SV101, SV102, and SV103 meet permit specifications.

IX. Other Requirements
1. IN COMPLIANCE. Facility certifies compliance that the applicable provisions of 40 CFR Part 60, Subpart MM are met.

EU-Topcoat – Application of topcoat coating, including tutone/repair.

1. IN COMPLIANCE. EU-Topcoat is operated with the RCO Control System installed, maintained, and operated in a satisfactory manner. This includes maintaining either a minimum VOC destruction efficiency of 95% or an average outlet VOC concentration of less than or equal to 5 ppm (as propane) for the RCO Control System. See FG-Facility, SC V.2.
2. IN COMPLIANCE. Water wash particulate controls for the spray booths of EU-Topcoat are installed, maintained, and operated in a satisfactory manner, including the monitoring and recordkeeping requirements of FG-Facility, SC VI.2.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of all coatings and materials used is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1 through 13. IN COMPLIANCE. According to facility documentation, stacks SV321, SV322, SV331, SV332, SV335, SV336, SV337, SV338, SV339, SV344, SV101, SV102, and SV103 meet permit specifications.

EU-Final Repair – Miscellaneous body coating processes, including final repair, transit coating, and spot repair. Spot repair is considered minor paint repairs not conducted in booth.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Dry filter particulate controls are installed, maintained, and operated in a satisfactory manner, including the monitoring and recordkeeping requirements of FG-Facility, SC VI.2.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content, water content, and density of any coating, as applied and as received, is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting

1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1, 2, 3, and 4. IN COMPLIANCE. According to facility documentation, stacks SV399, SV400, SV403, and SV404 meet permit specifications.

EU-Blackout/Wax – Application of black out and/or wax coatings.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Dry filter particulate controls are installed, maintained, and operated in a satisfactory manner, including the monitoring and recordkeeping requirements of FG-Facility, SC VI.2.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of all coatings and materials used is calculated by the manufacturer using results of Method 24 testing.
VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1 and 2. IN COMPLIANCE. According to facility documentation, stacks SV341 and SV342 meet permit specifications.

EU-Undercoat – Application of undercoat coating

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Dry filter particulate controls are installed, maintained, and operated in a satisfactory manner, including the monitoring and recordkeeping requirements of FG-Facility, SC VI.2.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content of all coatings and materials used is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1, 2, and 3. IN COMPLIANCE. According to facility documentation, stacks SV301, SV302, and SV303 meet permit specifications.

EU-Assembly Purge & Clean – Use of purge solvents with the automobile coating and assembly processes.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content, water content, and density of any solvent, as applied and as received, is calculated by the manufacturer using results of Method 24 testing.

VII. Reporting

1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Tanks – Various above ground and underground storage tanks used to store fluids, fuels, and solvents.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Fluid Fill – Vehicle fluid and fuel fill operations.

III. Process/Operational Restrictions
1. IN COMPLIANCE. Facility uses a vapor recovery system when fueling vehicles.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Start Up/Roll Test – After each new vehicle is completely assembled and the fluids are added, it is started and allowed to idle in the vehicle start-up area of the final assembly line. After start up, each vehicle is driven onto a roll test dynamometer where a series of accelerations and deceleration tests are performed.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1, 2, 3, and 4. IN COMPLIANCE. According to facility documentation, stacks SV610, SV611, SV612, and SV613 meet permit specifications.

EU-Natural Gas – Natural gas burning associated with the automotive assembly and painting operations, excluding plastic parts coating operations. The equipment includes process boilers, space heaters, process ovens, and miscellaneous support equipment installed under this permit.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

EU-Plastic – Coating of plastic parts

I. Emission Limits

1. IN COMPLIANCE. EU-Plastic did not exceed the permit limit of 515.8 lbs VOC/hour based on a monthly average. Highest monthly average during the compliance period was 162 lbs VOC/hour for the month of April 2016. Monthly average for June 2017 was 125 lbs VOC/hour.
2. IN COMPLIANCE. EU-Plastic did not exceed the permit limit of 700.78 tons of VOC per 12-month rolling time period. Highest 12-month rolling total VOCs was 247 tons for the 12-month rolling time period ending in June 2016. The 12-month rolling total VOC emissions for June 2017 was 199 tons.
3. IN COMPLIANCE. Facility demonstrates compliance with the PM limit of 5.5 lbs. per hour by demonstrating compliance with the monitoring requirements for the water wash system, as required in EU-Plastic VI.3.
4. IN COMPLIANCE. Facility demonstrates compliance with the PM limit of 7.69 tons per year by demonstrating compliance with the monitoring requirements for the water wash system, as required in EU-Plastic VI.3. The facility is not required to calculate PM emissions in EU-Plastic to demonstrate compliance with ROP No. MI-ROP-N0929-2011a, but does report PM emissions from EU-Plastic to MAERS on an annual basis. The facility reported 1.7 tons of PM emissions from EU-Plastic in its 2016 MAERS report.

II. Material Limits
1. IN COMPLIANCE. VOC content of coatings used in EU-Plastic do not exceed the VOC content limits as referenced in Rule 632, Table 66 for automotive parts. No primer is used in EU-Plastic, and there is no touch-up/repair performed in EU-Plastic. The topcoats are subject to the limits for high bake topcoat coatings which use Method 24 to determine VOC content. The applicable limits and compliance status of the coatings can be found in the table below:

Coating	Limit	Highest Reported Coating	Compliance Status
Basecoat, except red and black	4.8 lb VOC/gallon	4.79 lb VOC/gallon (7338R H3 Triple Yellow Tri-Coat; 7344 DR Avalanche)	IN COMPLIANCE
Basecoat, red and black	5.52 lb VOC/gallon	5.20 lb VOC/gallon (7283 Ruby Red Basecoat)	IN COMPLIANCE
Clearcoat	4.5 lb VOC/gallon	4.09 lb VOC/gallon (TKU 2000M 2K Clearcoat)	IN COMPLIANCE

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Mechanical collector for plastic crushing operations in EU-Plastic is installed and operated in a satisfactory manner.
2. IN COMPLIANCE. Water wash for coating spray booths are installed and operated in a satisfactory manner.
3. IN COMPLIANCE. Thermal oxidizers of the ovens in EU-Plastic are operated at a minimum temperature of 1400 F (or average temperature of 1400 F over 3-hour average) and minimum retention time of 0.5 seconds.

V. Testing/Sampling
1. IN COMPLIANCE. VOC content, water content, and density of all coatings and materials, as received and as applied, is determined using manufacturer's formulation data.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Each thermal oxidizer is equipped with a temperature monitoring device, with temperature alarms and continuous temperature recording device. Alarms are set to go off if temperatures fall below 1400 F. Temperature and monitoring records were reviewed on site during the inspection.
2. IN COMPLIANCE. The facility maintains the following information on a monthly basis for EU-Plastic:
a. Gallons (with water) of each coating used.
b. VOC content (minus water) of each coating, as applied.
c. If any coating is used on a given day that does not meet the limit specified in SC II.1 for its category, VOC emission calculations determining the daily volume-weighted average VOC content of all coatings in that category, as applied, shall be conducted for that day.
d. VOC mass emission calculations determining the monthly emission rate in the tons per calendar month.
e. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
3. IN COMPLIANCE. Water wash system is visually inspected on a weekly basis, and records are maintained of all inspections and maintenance. These inspections are performed by the on-site representative for the

manufacturer of the paint booths and records were reviewed during the inspection.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.
4. IN COMPLIANCE. Facility submits material usage data to AQD on a quarterly basis.

VIII. Stack/Vent Restrictions
1 through 5. IN COMPLIANCE. According to facility documentation, stacks SV510, SV516, SV519, SV526, and SVTALL meet permit specifications.

EU-Bulbcrusher – one 55-gallon drum-top fluorescent light bulb crusher, controlled by a bag filter followed in series by a HEPA filter and an activated carbon filter.

II. Material Limits
1. IN COMPLIANCE. Facility did not crush more than 150 eight-foot equivalent fluorescent light bulbs in EU-Bulbcrusher in any calendar day during the compliance period. Bulb crushing is usually only performed one day per month. The most eight-foot equivalent bulbs crushed in any day during the compliance period was 112.5 bulbs on September 1, 2016.
2. IN COMPLIANCE. Facility did not crush more than the equivalent of 3000 eight-foot fluorescent light bulbs in EU-Bulbcrusher per 12-month rolling time period. The highest 12-month total during the compliance period was 887 eight-foot equivalent bulbs in the 12-month rolling time period ending in October 2016. The 12-month rolling total for June 2017 was 670 eight-foot equivalent bulbs.

III. Process/Operational Restrictions
1. IN COMPLIANCE. EU-Bulbcrusher is installed, operated, and maintained to minimize emissions to the ambient air, following the Recommended Best Management Practices for Drum-top Crushers and Recommended Best Management Practices for Lamp Handling & Storage, as specified in Appendices 1 and 2.
2. IN COMPLIANCE. EU-Bulbcrusher is maintained and operated according to manufacturer's specifications and procedures.
3. IN COMPLIANCE. EU-Bulbcrusher is located a minimum 50 feet from the property line, 300 feet from any existing places of residence or private or public assembly, 500 feet from a school, apartment building, or institutional occupancy, and 1000 feet from a hospital or nursing home.
4. IN COMPLIANCE. Facility minimizes the time to change out the 55-drum portion of EU-Bulbcrusher. Drum change outs are performed according to manufacturer procedures.
5. IN COMPLIANCE. Facility replaces the carbon filter approximately once per year. Based on records, the filter was replaced on February 2, 2016, and April 21, 2017.
6. IN COMPLIANCE. Broken glass and metal pieces collected in the drum is properly handled, transported, and disposed of in accordance with State and federal regulations. Once filled, the drums are sent to US Ecology for disposal.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. EU-Bulbcrusher is properly installed with a bag filter followed by a HEPA filter and activated carbon filter.
2. IN COMPLIANCE. The drum appeared to be undented with a tight-fitting seal at the top, with no visible cracks or damage to the filter unit.
3. IN COMPLIANCE. Feed chute is covered when bulb crusher is not in use.

V. Testing/Sampling
1. NOT APPLICABLE. Facility replaces the carbon filter on an annual basis, so testing is not required. However, AQD performed testing during the June 2016 inspection and found the emissions from EU-Bulbcrushing to be within acceptable limits. The results of this testing can be found in the orange facility file.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility maintains records of the number and size of bulbs crushed on a daily, monthly, and 12-month rolling time period basis. Copies of these records were provided during the inspection.
2. IN COMPLIANCE. Facility maintains records of when the carbon filter is replaced. A copy of these records

were provided during the inspection.
3. IN COMPLIANCE. Facility maintains disposal records of the waste drums.
4. IN COMPLIANCE. Facility maintains and records ambient temperature during bulb crushing.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

VIII. Stack/Vent Restrictions
1. IN COMPLIANCE. EU-Bulbcrusher is located inside the maintenance building, and emissions are exhausted within the building.

D. FLEXIBLE GROUP CONDITIONS

FG-Facility – This flexible group covers equipment used for automotive assembly and painting operations, excluding plastic parts coating operations.

Associated Emission Unit IDs: All emission units (including EU-Phosphate, EU-Ecoat, EU-NGB Adhesives & Sealers, EU-Deadeners, EU-Glass Install, EU-Guidecoat, EU-Topcoat, EU-Final Repair, EU-Blackout/Wax, EU-Undercoat, EU-Assembly Purge & Clean, EU-Tanks, EU-Fluid Fill, EU-Start-Up/Roll Test, EU-Natural Gas) and flexible groups associated with the automotive assembly and painting operations, including all clean-up and purge activities associated with automotive painting and assembly operations, storage tanks, and paint sludge handling and disposal operations.

I. Emission Limits

Pollutant	Limit	Highest Reported Emissions	Status
1. VOC	**732.0 tons per 12-month rolling time period**	**280.7 tons for 12-month period ending Jan 2016; 12-month rolling total VOC emissions were 246.8 tons for 12-month rolling time period ending June 2017.**	**IN COMPLIANCE**
2. VOC	**4.8 pounds per job, monthly average based on 12-month rolling time period.**	**3.1 pounds per job, monthly average, for 12-month rolling time period ending May 2017; Monthly average was 3.0 pounds per job for 12-month rolling time period ending June 2017.**	**IN COMPLIANCE**
3. PM-10	**73.0 tons per 12-month rolling time period**	**21.0 tons for 12-month rolling time period ending Jan. 2016;12-month rolling total PM-10 emissions were 16.9 tons for 12-month rolling time period ending June 2017. Note: facility reports total PM to demonstrate compliance with this limit.**	**IN COMPLIANCE**
4. PM-2.5	**73.0 tons per 12-month rolling time period**	**21.0 tons for 12-month rolling time period ending Jan. 2016;12-month rolling total PM-2.5 emissions were 16.9 tons for 12-month rolling time period ending June 2017. Note: Facility reports total PM to**	**IN COMPLIANCE**

		demonstrate compliance with this limit.	
5. NOx	**102.4 tons per 12-month rolling time period**	**68.0 tons for 12-month rolling time period ending June 2016; 12-month rolling total NOx emissions were 52.7 tons for 12-month rolling time period ending in June 2017.**	**IN COMPLIANCE**

II. Material Limits
1. IN COMPLIANCE. Natural gas usage was below the permit limit of 1995 MM cubic feet per 12-month rolling time period. Highest total natural gas usage was 1,330 MM cubic feet for the 12-month rolling time period ending June 2016. 12-month total natural gas usage was 1029 MM cubic feet in June 2017.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Each spray coating booth and scuff booth operation is equipped with either water wash or dry filters to control particulate emissions.

V. Testing/Sampling
1. IN COMPLIANCE. The most recent testing to verify booth and oven capture efficiency of the Prime (Guidecoat), Basecoat, and Clearcoat Systems was performed the week of October 24, 2016, following introduction of production of Continental vehicles. Results showed the following capture efficiencies during coating of Continental vehicles: Prime Booth - 84.3 %; Prime Oven - 10.5%; Basecoat Booth - 76.7%; Basecoat Oven – 13.0%; Clearcoat Booth – 48.2%; and Clearcoat Oven – 36.9%. Previous testing to verify booth and oven capture efficiency of the Prime (Guidecoat), Basecoat, and Clearcoat Systems was performed the week of October 28, 2013, on Mustang vehicles following the implementation of the "3-Wet" coating system. Results showed the following capture efficiencies: Prime Booth - 81.8 %; Prime Oven - 10.4%; Basecoat Booth - 82.5%; Basecoat Oven – 10.0%; Clearcoat Booth – 38.9%; and Clearcoat Oven – 42.4%.
2. IN COMPLIANCE. Testing to demonstrate compliance with the VOC emission rate and destruction efficiency of the RCO System was most recently performed on March 22, 2017, which showed an average VOC outlet concentration of 4 ppm and a destruction efficiency of 91%; while the destruction efficiency did not meet the permitted minimum of 95%, the VOC outlet concentration of 4 ppm demonstrated compliance with the maximum allowable VOC outlet concentration of 5 ppm per EU-Topcoat, IV.1.
3. IN COMPLIANCE. The most recent testing to verify transfer efficiency of the Prime (Guidecoat), Basecoat, and Clearcoat Systems was performed the week of October 24, 2016, following the change in body style from the Fusion to the Continental; testing showed an average transfer efficiency for all three booths of 78.4% using Continental vehicles during testing. Testing was previously performed on Mustang vehicles the week of October 28, 2013, with results showing an average transfer efficiency for all three booths of 77.1%.
4. IN COMPLIANCE. With AQD approval, Ford performed testing from October 4 through October 26, 2011, to determine both particulate matter (PM) and condensable particulate matter (CPM) emission rates. The scope of the test plan included plant-specific testing as well as representative sources across three Ford facilities – FRAP/AAI, Dearborn Truck Plant, and Michigan Assembly Plant, to allow the facilities to demonstrate compliance with their PM, PM-10 and PM-2.5 emission limits without having to test each individual source at each facility. Specific to this condition, testing on a Guidecoat Manual (Prime Manual) booth and Clearcoat Robot booth was conducted at FRAP on October 12-13, 2011; testing on a Guidecoat Robot (Prime Robot) booth was conducted at Michigan Assembly on October 25-26, 2011; and testing on a Basecoat Manual and Basecoat Robot booth was performed at Dearborn Truck on October 4-5, 2011. These tests demonstrate compliance with this testing condition; full results of PM/CPM emission rate testing performed under the scope of this test plan can be found in the orange facility file.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. The following records/calculations for FG-Facility are maintained:
a. Identification, VOC content, and usage of each material used in FG-Facility;
b. Number of jobs per calendar month;
c. Calculations showing the monthly and 12-month rolling time period VOC emission rates. Calculations include the capture and control efficiency of each control device used;
d. Calculations showing the average monthly VOC emission rate on a pound per job basis per 12-month rolling time period;
e. Calculations showing the PM-10 mass emission rate in tons on a monthly and 12-month rolling time period basis;

f. Records of total natural gas used on a monthly and 12-month rolling time period basis;
g. Calculations showing the mass emission rate of NOx in tons on a monthly and 12-month rolling time period basis;
h. Hours of operation on a monthly and 12-month rolling time period basis.
2. IN COMPLIANCE. Facility performs weekly inspections of each guidecoat, basecoat, and clearcoat spray booth, and monthly inspections of each final repair spray booth and scuff booth. Records of these inspections are maintained on file at the facility and were reviewed on site during the inspection.
3. IN COMPLIANCE. Facility maintains records of any modifications made, when applicable.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.
4. IN COMPLIANCE. Facility submits quarterly reports for each emission unit and flexible group included in this permit of the actual VOC, PM-10, and NOx emission rates for each limit included in the permit.
5. IN COMPLIANCE. Facility notified AQD in writing of projects authorized by FG-Facility, SC IX.3 and 4. Notification was received by AQD on October 24, 2016, regarding the installation of a 7,000-gallon purge solvent tank and a 7,000-gallon waste paint recovery tank to replace the storage of these materials in totes. Based on information provided by the facility, the installations of the tanks do not constitute a meaningful change in the nature or quantity of toxic air contaminants emitted from the stationary source, and therefore do not require a Permit to Install.

IX. Other Requirements
1. IN COMPLIANCE. There have been no changes to operations subject to R.201 since the revised Title V permit was issued on September 12, 2012.
2. IN COMPLIANCE. The facility is in compliance with the VOC limits in FG-Facility, I.1 and 2, which demonstrates compliance with the requirements of 40 CFR Part 60, Subpart MM and R.336.1610.
3 and 4. IN COMPLIANCE. The facility has not installed or modified equipment or operations which would require an increase in the emission limits listed in FG-Facility I.1 through 5, result in a meaningful change in the nature or quantity of TACs, or be a major source of HAPs.
5. NOT APPLICABLE. No changes to the emission limits in FG-Facility, I.1 through 5, due to changes in federal regulations or changes to the State Implementation Plan have been required.
6. NOT APPLICABLE. Facility has not requested the termination of the flexible emission limit provisions of the permit.

FG-Controls – Three regenerative catalytic oxidizers and one regenerative thermal oxidizer used for control of VOC emissions form the electrocoat system, the paint spray booths, and curing ovens.

Associated Emission Unit IDs: EU-Ecoat, EU-Guidecoat, EU-Topcoat

III. Process/Operational Restrictions
1. IN COMPLIANCE. The facility is in compliance with the following conditions:
a. A malfunction abatement plan (MAP) for FG-Controls is implemented and maintained in accordance with Appendix 3.
b. An operation and maintenance plan (O&M Plan) for FG-Coating is implemented and maintained in accordance with Appendix 3.
c. An outlet concentration monitoring plan (OCM Plan) has been developed, maintained, and implemented, in accordance with Appendix 3, to monitor the performance of the control systems. Results of testing performed in accordance with the OCM Plan are reported to AQD and can be found in the orange facility file.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. The three regenerative catalytic oxidizer beds are equipped with a device to monitor and record the temperature of the beds on a continuous (at least once every 15 minutes) basis during operation of EU-Ecoat, EU-Guidecoat, and EU-Topcoat.
2. IN COMPLIANCE. Records of the temperature monitoring of the three regenerative catalytic oxidizer beds are maintained and were reviewed on site during the inspection.
3. IN COMPLIANCE. The regenerative thermal oxidizer is equipped with a device to monitor and record the temperature of the combustion chamber on a continuous (at least once every 15 minutes) basis during operation

of EU-Ecoat, EU-Guidecoat, and EU-Topcoat.
4. IN COMPLIANCE. Records of the temperature monitoring of the regenerative thermal oxidizer are maintained at the facility and were reviewed on site during the inspection.
5. IN COMPLIANCE. Facility replaces the thermocouples every year (usually during July shutdown) rather than perform annual verification, as part of the MAP for the FG-Controls. In 2017, the thermocouples of the RCO were replaced during July shutdown and the thermocouples for the RTO was replaced on September 8.
6. IN COMPLIANCE. Bypass monitoring has been performed. The bypass valves are controlled by an automated system with alarms set for any valve which is bypassed. The facility records the date, time, and duration of all emissions through bypass valves and reports this information in the annual and semiannual deviation reports.
7. IN COMPLIANCE. Compliance with FG-Controls SC 1 and 3 demonstrates compliance with the thermal/catalytic oxidizer monitoring requirement specified in 40 CFR 60.394 and 40 CFR 60.395.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

IX. Other Requirements
1. IN COMPLIANCE. Facility reports any excursions of Compliance Assurance Monitoring (CAM) in accordance with 40 CFR 64.6(c)(2).
2. IN COMPLIANCE. Facility complies with applicable requirements of 40 CFR Part 64.

FG-Auto MACT – Emission units subject to 40 CFR 63, Subpart IIII – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks.

Associated Emission Unit IDs: EU-Ecoat, EU-NGB Adhesives & Sealers, EU-Deadeners, EU-Glass Install, EU-Guidecoat, EU-Topcoat, EU-Final Repair, EU-Blackout/Wax, EU-Undercoat, and EU-Final Assembly Purge & Clean

I. Emission Limits
1. NOT APPLICABLE. E-Coat materials do not contain reportable HAPs, so facility opts to use the HAP limit in FG-Auto MACT, 1.2 to demonstrate compliance, as allowed in FG-AutoMACT, I.5.
2. IN COMPLIANCE. Coatings used in FG-Auto MACT are in compliance with the limit of 1.10 lb HAP/gallon of applied coating solids (GACS) per calendar month. Highest monthly average reported before control was 0.28 lb HAP/GACS for the month of April 2016.
3. IN COMPLIANCE. Coatings used in EU-NGB ADHESIVES & SEALERS are in compliance with the limit of 0.01 lb HAP/lb coating per calendar month. Facility reports no HAP in the coatings used in EU-NGB ADHESIVES & SEALERS.
4. IN COMPLIANCE. Coatings used in EU-DEADENERS are in compliance with the limit of 0.01 lb of HAP per lb coating per calendar month. Facility reported no use of coatings in EU-DEADENER during the compliance period.
5. IN COMPLIANCE. Facility chooses to comply with the limit in FG-Auto MACT, I.2 because the e-coat materials do not contain reportable HAPs.

III. Process/Operational Restrictions
1. IN COMPLIANCE. Facility has developed and implements a work practice plan to minimize 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 under FG-Auto MACT SC I.1 through 4, consistent with the requirements of 40 CFR 63.3094. A copy of this plan can be found in the facility file.
2. NOT APPLICABLE. All coatings used in FG-AutoMACT are compliant with the HAP limits in FG-AutoMACT, I.1 through 4, so add-on controls are not required to demonstrate compliance.
3. IN COMPLIANCE. Facility has developed and implements a startup, shutdown, and malfunction plan (SSM Plan) in accordance with 40 CFR 63.6(e)(3).
4. IN COMPLIANCE. Facility operates and maintains FG-Auto MACT in accordance with the provisions in 40 CFR 63(e)(1)(i).
5. IN COMPLIANCE. Facility maintains a log detailing the operation and maintenance of any emission capture

system, control device, or continuous parameter monitor used to demonstrate compliance with emission limits set in FG-Auto MACT, I.1 through 4. Records are maintained at the facility and were reviewed on site during the inspection.

V. Testing/Sampling
1. IN COMPLIANCE. Facility has performed the applicable performance tests and compliance demonstrations prior to the compliance dates, in accordance with 40 CFR 63, Subpart IIII. This includes transfer efficiency testing, testing of the add-on controls, and demonstrating continuous compliance with the HAP limits.
2. IN COMPLIANCE. Facility submitted a request to AQD, dated January 20, 2011, to waive the testing requirement to verify transfer efficiency of the Guidecoat (Prime) System and provided a demonstration that the transfer efficiency testing performed on the Guidecoat (Prime) System on October 30, 2006, which demonstrated a transfer efficiency of 83%, was still valid. This waiver request was approved by AQD on March 10, 2011. Since that time, the transfer efficiency of the Prime System was tested the week of October 28, 2013, following the implementation of the "3-Wet" coating system.
3. IN COMPLIANCE. Mass fraction of each organic HAP for each material used is calculated in accordance with the procedures established under 40 CFR 63.3151(a)(1) through (5).

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility maintains required records and calculations in an acceptable format.
2. IN COMPLIANCE. An initial compliance demonstration was conducted from April 1 through May 31, 2007, in accordance with 40 CFR Part 63, Subpart IIII. Notification of Compliance was received by AQD on June 29, 2007.
3. IN COMPLIANCE. Continuous Parameter Monitor System (CPMS) is installed, operated, and maintained in accordance with the requirements of 40 CFR 63.3168(a). The control system has bypass valves, which are monitored and operated in accordance with 40 CFR 63.3168(b). Facility reports the duration and location of all bypass valve openings in its deviation reports.
4. IN COMPLIANCE. Facility maintains the records required by 40 CFR 63.3130 in an acceptable format.
5. IN COMPLIANCE. Facility maintains the required records and calculations, as listed in a. through i. of this condition, as required by 40 CFR 63.3130.
6. NOT APPLICABLE. Facility does not use add-on controls to demonstrate continuous compliance with the emission limits in S.C. I.1 through I.4.
7. NOT APPLICABLE. Facility does not require the control system to be in non-bypass mode to demonstrate continuous compliance with the emission limits in S.C. I.1 through I.4.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.
4. IN COMPLIANCE. Semiannual compliance reports for 40 CFR Part 63, Subpart IIII are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per 40 CFR 63.3120(a).
5. IN COMPLIANCE. An initial compliance demonstration was conducted from April 1 through May 31, 2007, in accordance with 40 CFR Part 63, Subpart IIII. Notification of Compliance was received by AQD on June 29, 2007.
6. IN COMPLIANCE. The results of all performance tests on the RCO Control System are reported to AQD.
7. IN COMPLIANCE. Any startups, shutdowns, or malfunctions of the emission control device are recorded and, if applicable, an SSM report is submitted to AQD with the semiannual reports. During this compliance period, no SSM reports were submitted.

IX. Other Requirements
1. IN COMPLIANCE. Based on the information reviewed during this inspection and the semiannual compliance certification reports submitted by FRAP certifying compliance with Subpart IIII, the facility appears to be in compliance with the applicable provisions of 40 CFR Part 63, Subpart IIII – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks.

FG-Old Facility – Existing (constructed prior to April 2, 2002) liquid storage tanks which hold more than 5,000 gallons but less than 50,000 gallons and/or new liquid storage tanks which hold more than 5,000 gallons but less than 10,000 gallons of methanol/windshield washer fill solvents that are dispensed to newly assembled vehicles.

Associated Emission Unit ID – EU-Tanks.

III. Process/Operational Controls
1. IN COMPLIANCE. All tanks in FG-Old Facility are considered existing tanks, installed prior to April 2, 2002, and have not been reconstructed. Facility provided initial Notification of Compliance and maintains the required information, including tank capacity and vapor material of the material stored in the tanks, in accordance with 40 CFR 63.2343(b).
2. NOT APPLICABLE. There are no new or reconstructed tanks in FG-Old Facility, so this condition does not apply.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility maintains records of the vapor pressure of the contents of the tanks. The tanks are used to store wiper fluid with a vapor pressure less than 4.0 psia.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.
4 and 5. IN COMPLIANCE. Facility provided initial Notification of Compliance; the vapor pressure of the material stored in the tanks is less than 4.0 psia, so this flexible group is not subject to the emission control and monitoring requirements in Subpart EEEE. Facility retains a record of the vapor pressure of the contents of the tanks to demonstrate compliance.

IX. Other Requirements
1. IN COMPLIANCE. Based on semiannual compliance certification reports submitted by FRAP certifying compliance with ROP No. MI-ROP-N0929-2011a, the facility appears to be in compliance with the applicable provisions of 40 CFR Part 63, Subpart EEEE – National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline).

FG-Plastic MACT - Emission units subject to 40 CFR 63, Subpart PPPP – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products.

I. Emission Limits
Note: FG-Plastic MACT is considered an existing Thermoplastic Olefin (TPO) coating source, so of the emission limits listed in FG-Plastic MACT, I.1 through 8, only the limit of I.7 applies:
7. IN COMPLIANCE. Facility reports an organic HAP emission rate of 0.18 lbs HAP/lb of coating solids on a 12-month rolling time period basis during the compliance period, demonstrating compliance with the permit limit of 0.26 lb HAP/lb of coating solids per 12-month rolling time period.
9b. IN COMPLIANCE. Facility chooses to demonstrate compliance with the HAP emission rate by using the emission rate without add-on control option in FG-Plastic MACT, I.9.b.
10. IN COMPLIANCE. Facility certifies that FG-Plastic MACT is in compliance with the applicable emission rate in FG-Plastic MACT, I.7.
11. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so these conditions are not applicable.
12. NOT APPLICABLE. Only the emission limit for existing TPO coating source applies to FG-Plastic MACT.

II. Material Limits
1. IN COMPLIANCE. Thinners and additives used in FG-Plastic MACT do not contain organic HAPs.
2. IN COMPLIANCE. Cleaning materials used in FG-Plastic MACT do not contain organic HAPs.

III. Process/Operational Controls
1 through 5. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so these conditions are not applicable.

IV. Design/Equipment Parameters
1. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.

V. Testing/Sampling
1. IN COMPLIANCE. The mass fraction of organic HAP for each material used, the mass fraction of coating solids for each coating, and the density of each material used in FG-Plastic MACT is calculated in accordance with 40 CFR Part 63, Subpart PPPP.
2 and 3. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so these conditions are not applicable.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. An initial compliance demonstration was conducted from April 1 through May 31, 2007, in accordance with 40 CFR Part 63, Subpart PPPP. Notification of Compliance was received by AQD on June 29, 2007.
2. IN COMPLIANCE. Facility maintains required records and calculations in an acceptable format.
3. IN COMPLIANCE. Facility maintains the required records and calculations, as listed in a. through l. of this condition, as required by 40 CFR 63.4530.
4. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.
5. IN COMPLIANCE. Facility demonstrates continuous compliance for each coating used for the compliant coating option, each thinner, and each cleaning material in accordance with 40 CFR 63.4541.
6. IN COMPLIANCE. Facility demonstrates continuous compliance with the emission limit in FG-Plastic MACT, I.7.
7. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.
8. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.
9. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.
10. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.
4. IN COMPLIANCE. Facility has not reported the use of any thinners or cleaning materials which do not meet the criteria specified in 40 CFR 63.4542(a).
5. IN COMPLIANCE. Reported HAP emission rates have not exceeded the emission limit in FG-Plastic MACT, I.7.
6. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.
7. IN COMPLIANCE. An initial compliance demonstration was conducted from April 1 through May 31, 2007, in accordance with 40 CFR Part 63, Subpart PPPP. Notification of Compliance was received by AQD on June 29, 2007.
8. IN COMPLIANCE. Semiannual compliance reports for 40 CFR Part 63, Subpart PPPP are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per 40 CFR 63.4510.
9. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.
10. NOT APPLICABLE. FG-Plastic MACT does not use add-on controls to demonstrate compliance, so this condition is not applicable.

IX. Other Requirements
1. IN COMPLIANCE. Based on the information reviewed during this inspection and the semiannual compliance certification reports submitted by FRAP certifying compliance with Subpart PPPP, the facility appears to be in compliance with the applicable provisions of 40 CFR Part 63, Subpart PPPP – National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products.

FG-Coldcleaners – Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv).

II. Material Limits
1. IN COMPLIANCE. Facility does not use any cleaning solvents in EU-Coldcleaners containing the compounds listed in this condition.

III. Process/Operational Restrictions
1. IN COMPLIANCE. Cleaned parts are dried for no less than 15 seconds.
2. IN COMPLIANCE. Routine maintenance is performed per manufacturer's recommendations.

IV. Design/Equipment Parameters
1b. IN COMPLIANCE. Emissions from the cold cleaner is released to the general in-plant environment.
2. IN COMPLIANCE. Cold cleaner is equipped with a device for draining cleaned parts.
3. IN COMPLIANCE. Lid of cold cleaner is closed when not in use.
4 and 5. NOT APPLICABLE. Vapor pressure of cleaning solvent is less than 0.3 psia and is not heated.

VI. Monitoring/Recordkeeping
1. NOT APPLICABLE. Cleaning solvent is not heated.
2. IN COMPLIANCE. Facility maintains the required information for each cold cleaner, including date of installation and equipment specifications and identification.
3. IN COMPLIANCE. Facility maintains written operating procedures, which are posted near the cold cleaners.
4. IN COMPLIANCE. Waste cleaning solvents are kept in closed containers.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

FG-Rule 287(c) – Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 287(c).

NOT APPLICABLE. Per Mr. Filipiak, there are currently no emission units subject to the conditions of FG-Rule 278(c), so the conditions of this flexible group were not evaluated during this inspection, aside from the reporting requirements under FG-Rule 278(c), VII.

VII. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

FG-Rule290 – Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Per Mr. Filipiak, the only emission unit subject to FG-Rule290 is an aluminum shredder, which is controlled by a cyclone.

I. Emission Limits
1. IN COMPLIANCE. A review of emission records shows that the aluminum shredder emits less than 500 pounds of particulate matter (aluminum dust) per month. The highest monthly emission rate of particulate matter during the compliance period was 14.1 pounds in February 2017.

VI. Monitoring/Recordkeeping
1.a through e. IN COMPLIANCE. Facility maintains records in sufficient detail identifying the nature of the pollutant and other required data to demonstrate compliance with Rule 290.
2.a and b. IN COMPLIANCE. Facility maintains a written description of the emission unit (aluminum shredder) and control device (cyclone), including control efficiency and maximum design throughput.

3. IN COMPLIANCE. Facility performs and records non-certified visible emission readings on a monthly basis. Based on records, no visible emissions have been observed.

II. Reporting
1. IN COMPLIANCE. Deviations are reported pursuant to GC 21 and 22 of Part A.
2. IN COMPLIANCE. Semiannual reports of monitoring and deviations are submitted by March 15 (for reporting period July 1 through December 31) and September 15 (for reporting period January 1 through June 30) each year, as required per GC 23 of Part A.
3. IN COMPLIANCE. Annual compliance certification is submitted by March 15 for the previous calendar year, as required per GC 19 and 20 of Part A.

MACT Subpart DDDDD

IN COMPLIANCE. The exempt boilers subject to 40 CFR 63, Subpart DDDDD are not included in the ROP. Facility submitted an Initial Notification of Applicability on May 24, 2013, and submitted the Notifications of Compliance and Tune-Up to U.S. EPA on February 12, 2016, and March 1, 2017.

EU-Generators

IN COMPLIANCE. There are no conditions in for EU-Generators in ROP No. MI-ROP-N0929-2011a, but conditions will be added when the ROP is renewed. A review of operational records for the generators provided during the inspection show that each generator has been operated less than 500 hours per year; the generators have mainly operated only for the purpose of maintenance checks and readiness testing and no generator exceeded 70 hours per 12-month rolling time period. The facility has followed the work practice standards required by 40 CFR 63 Subpart ZZZZ, Table 2c, including annual inspections and changing of oil and filters. Note: In its Semi-Annual 1 ROP Certification report, received on September 14, 2017, FRAP reported deviations for failing to perform annual oil/filter changes on 14 SI emergency generators in 2014, and failure to log monthly records of hours of operation for the Body Shop emergency generator from 2013 through 2015. These deviations were noted during in internal audit and were corrected prior to January 2016.

FINAL COMPLIANCE DETERMINATION:

At the time of inspection, FRAP has several unresolved violations of Rule 901 due to ongoing nuisance odors verified by AQD. As a result, FRAP is determined to be in noncompliance with the conditions of ROP No. MI-ROP-N0929-2011a and applicable State and federal regulations at this time.

NAME _____ DATE 10-26-17 SUPERVISOR JK