DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N092963716

FACILITY: Ford Motor Company - Flat Rock Assembly		**SRN / ID:** N0929
LOCATION: 1 INTERNATIONAL DR, FLAT ROCK		**DISTRICT:** Detroit
CITY: FLAT ROCK		**COUNTY:** WAYNE
CONTACT: Katie Ernst , Environmental Engineer		**ACTIVITY DATE:** 07/18/2022
STAFF: Jonathan Lamb	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: On-site inspection, FY 2022		
RESOLVED COMPLAINTS:		

SECTION 1: Ford Flat Rock Assembly
DATE OF INSPECTION: July 18, 2022
INSPECTED BY: Jonathan Lamb, EGLE-AQD
PERSONNEL PRESENT: Katie Ernst - Senior Environmental Engineer; Carmela Franco - Senior Environmental Compliance Engineer
CONTACT PHONE NUMBER: 248-496-4353 (Katie Ernst)

SECTION 2: Enterprise Data Center 2
DATE OF INSPECTION: September 28, 2022
INSPECTED BY: Jonathan Lamb, EGLE-AQD
PERSONNEL PRESENT: Tim Pokoyoway - Environmental Engineer; Ken Wojtkowiak - Facilty Manager, CBRE Compliance; Lasanthi Banduseela - Electical Engineer; Paul Parton - Electrical Engineer
CONTACT PHONE NUMBER: 313-986-3082 (Tim Pokoyoway)

BACKGROUND:
Ford Motor Company - 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 considered a major source for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) and is subject to Title V permitting requirements. The facility was 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 facility operates under Section 1 of Renewable Operating Permit (ROP) MI-ROP-N0929-2018a.

The building area is nearly 3 million square feet and is located on 400 acres of land. The facility performs stamping, assembling, and painting of metal body parts, as well as final assembly to produce a finished automobile. The facility ceased the painting of plastic parts on site in October 2017. VOC controls, including three regenerative catalytic oxidizers (RCOs), were installed in 1997. Ford has built the Ford Mustang at this facility since 2004; the facility produces around 320-400 cars per day. In the past, Ford has often produced a second model at this site in addition to the Mustang, but only the Mustang is being produced at the present time. Currently, the facility operates one shift, 5:45 AM to 4:00 PM.

Ford Flat Rock - Enterprise Data Center 2 supports computer servers for Ford Motor Company. The facility started operations in 2019 in a separate building west of Ford Flat Rock Assembly Plant. The facility operates 24/7 with 8-12 employees on site. The facility operates under Section 2 of ROP MI-ROP-N0929-2018a.

COMPLAINT/COMPLIANCE HISTORY:
Since starting operations in 1987, this FRAP 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. There has been a decrease in the number of odor complaints since plastic coating operations ceased in October 2017, but AQD continues to receive periodic complaints and most recently issued violation notices to FRAP on February 27, 2020, and December 18, 2020, for nuisance odors in violation of Rule 901.

FRAP has also had noncompliance issues with the operation of the RCO System; the most recent violation notice was issued on February 18, 2022, for failing to meet the destruction efficiency or outlet VOC

concentration during testing performed on December 7, 2021. The facility demonstrated compliance during follow up testing performed on April 20, 2022, resolving the violation.

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:

Ford Motor Company – Flat Rock Assembly Plant
Exterior panels (doors, fenders, hoods, etc.) are stamped from steel coils by four hydraulic presses on site. Note: on-site stamping operations are expected to cease sometime in 2023. Interior parts are delivered from outside suppliers. The panels are put together using robotic welding and riveting machines, creating the body of the vehicle.

The vehicle shells are conveyed through a phosphate line, which cleans oil and dirt from the surface to allow better adhesion of the coatings, and are then rinsed and sent 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 the e-coat oven (250°F), which is controlled by a Regenerative Thermal Oxidizer (RTO). Next, the vehicle passes through the Sealer Deck, where seams are sealed using both automated and manual (brush) applicators, before passing through the sealer over (350°F) which is 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 ("guidecoat") and topcoat ("basecoat" and "clearcoat") are applied. Lines A and B are identical and run parallel with each other. The facility uses 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 high-volume, low-pressure (HVLP) sprayers are also used on areas the robotic sprayers cannot reach. Lines A and B use a water curtain for particulate control and all 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 are repaired using manual paint cup guns, and then cured in an oven. Vehicles may also be sent to the Tutone/Repair Booth if they require the roofs to be painted black. The Tutone/Repair Booth uses mesh filters to control particulate. After the repair process is finished or the roofs are painted, 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.

The RCO System is used to control emissions from the body coating 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; the RTO exhausts through the stack of RCO C.

The vehicles are completed in Final Assembly – bumpers attached to frames, seats and windshields installed, etc. The cars are fueled and tested on site in one of four roll-off dynamometers, where a series of accelerations and decelerations are performed. The cars are inspected and if any defects are noted the cars are sent to Final Repair.

Note: The four roll-off dynamometers (formerly permitted as EU-START UP/ROLL TEST) were removed during the issuance of ROP No. MI-ROP-N0929-2018 because it has been determined that the emissions from these units, servicing fully assembled mobile sources, are properly regulated under Title II of the Clean Air Act.

Ford Motor Company – Enterprise Data Center 2
Enterprise Data Center 2 supports computer servers for Ford Motor Company. Ford has oversight of the facility, including compliance with environmental regulations, but CBRE handles the daily operations on site as

the facility manager. The facility is permitted for eleven diesel-fired engines which are used to power the facility in case of power outages. There are eight generators (permitted as EUENGINE01 through EUENGINE08) for back up for the computer servers. These generators are all 2,500 kW CAT Model 3516C and are located in Data Hall 1 and Data Hall 2, with four engines in each. There is one 500 kW generator (permitted as EULIFESAFETYENG) located in Data Hall 2 which is used as back up power for the building (lights, security, etc.). There are two fire pump engines (permitted as EUFIREPUMPENGS) located in a separate pump house. Each engine is a Clarke Model UFADR8 rated at 250 hp and are used in case of fires on site. Together, these engines are permitted as FGENGINES. These engines were installed periodically between 2019 and 2020. The table below summarizes the commissioning date of each engine:

Emission Unit ID	Equipment ID	Commissioning Date	AQD Notification Date
EULIFESAFETYEND	EDC2 House Gen	9/27/2019	10/25/2019
EUENGINE01	EDC2 Gen 1-1	2/17/2020	3/11/2020
EUENGINE02	EDC2 Gen 1-2	2/17/2020	3/11/2020
EUENGINE03	EDC2 Gen 1-3	2/17/2020	3/11/2020
EUENGINE04	EDC2 Gen 1-4	2/17/2020	3/11/2020
EUENGINE05	EDC2 Gen 2-1	11/22/2019	12/9/2019
EUENGINE06	EDC2 Gen 2-2	11/22/2019	12/9/2019
EUENGINE07	EDC2 Gen 2-3	11/22/2019	12/9/2019
EUENGINE08	EDC2 Gen 2-4	11/22/2019	12/9/2019
EUFIREPUMPENGS	EDC2 Fire Pump #1	12/28/2019	3/4/2020
EUFIREPUMPENGS	EDC2 Fire Pump #2	12/28/2019	3/4/2020

At the time of inspection, the engines have only been operated for readiness testing; no engine has been operated for emergency or non-emergency purposes. The facility performed various types of readiness testing. Monthly testing is performed for one hour each month at 80% capacity. Annual testing is performed for one four-hour period at 100% capacity once per year. And Biannual testing is performed once every two years by cutting power to the facility and letting the engines supply power to the servers and building for 2-3 hours to simulate an actual power outage.

DTE supplies the fuel used to run the engines and performs all scheduled maintenance activities, including filter replacement, oil analysis, and/or oil changes.

APPLICABLE RULES/PERMIT CONDITIONS:

SECTION 1 - FORD MOTOR COMPANY – FLAT ROCK ASSEMBLY PLANT

Ford Motor Company - Flat Rock Assembly is a Title V facility operating under Section 1 of Renewable Operating Permit (ROP) No. MI-ROP-N0929-2018a, revised on June 6, 2022.

FRAP is also subject to the following federal regulations:

EU-ECOAT, EU-GUIDECOAT, EU-TOPCOAT, and EU-ASSEMBLY PURGE & CLEAN 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-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, and EU-TOPCOAT are subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 CFR, Part 64. Each of these emission units have a control device and potential pre-control emissions of Volatile Organic Compounds greater than the major source threshold level.

FG-BOILER MACT, various natural gas-fired boilers 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.

FG-CIRICEMACT, FG-SIRICEMACT, and FG-500HPCIRICEMACT are generators subject to National Emission Standards for Hazardous Stationary Reciprocating Internal Combustion Engines as promulgated in 40 CFR Part 63, Subpart ZZZZ.

Records from July 2020 through June 2022 were reviewed for the purpose of determining Ford Motor Company - Ford Flat Rock's compliance during this evaluation. Some of these records can be found in the orange facility file; others were reviewed on site.

ROP No. MI-ROP-N0929-2018a – Section 1, applicable conditions:

C. EMISSION UNIT CONDITIONS

EU-PLASTIC PURGE & CLEAN – Use of purge and cleaning solvents within the plastic parts coating operation (EU-PLASTIC).

Note: EU-PLASTIC PURGE & CLEAN ceased operation in October 2017, so this emission unit was not evaluated during the inspection.

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-PRETREATMENT – 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 are 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-EXPORT WAX – Application of cavity wax coatings to vehicles to be exported from the country.

Note: The facility no longer applies wax coatings, so this emission unit was not evaluated during the inspection.

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-PLASTIC – Coating of plastic parts

Note: EU-PLASTIC ceased operation in October 2017, so this emission unit was not evaluated during the inspection.

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.

Note: EU-BULBCRUSHER ceased operation in 2018, so this emission unit was not evaluated during the inspection.

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 Units: All emission units (including EU-STAMPINGSHOP, EU-PRETREATMENT, EU-ECOAT, EU-NGB ADHESIVES & SEALERS, EU-DEADENERS, EU-GLASS INSTALL, EU-GUIDECOAT, EU-TOPCOAT, EU-FINAL REPAIR, EU-BLACKOUT/WAX, EU-EXPORTWAX EU-UNDERCOAT, EU-ASSEMBLY PURGE & CLEAN, EUTANKS, EU-FLUID FILL, EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, EU-PLASTICSBOILER, EUMSCEMGEN1 through 11, EU-LNCNTEMGEN, EUPAINTEMGEN, EU-UTFPH-SOUTH, EU-UTFPHMIDDLE, EU-UTFPH-NORTH, EI-MSCFIREPUMP, EU-SERVEEMGEN, EU-HEATERS, EU-BULBCRUSHER, EUALSHREDDER, EU-COLDCLEANERS, EU-RULE287, and EU-RULE290) and flexible groups associated with the automotive assembly and painting operations. This includes all clean-up and purge activities associated with automobile 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	125.1 tons for 12-month period ending April 2021; 12-month rolling total VOC emissions were 116.2 tons for 12-month rolling time period ending June 2022.	IN COMPLIANCE
2. VOC	4.8 pounds per job, monthly average based on 12-month rolling time period.	3.6 pounds per job, monthly average, for 12-month rolling time period ending June 2022.	IN COMPLIANCE
3. PM-10	73.0 tons per 12-month rolling time period	9.6 tons for 12-month rolling time period ending April 2021; 12-month rolling total PM-10 emissions were 8.8 tons for 12-month rolling time period ending June 2022.	IN COMPLIANCE
4. PM-2.5	73.0 tons per 12-month rolling time period	9.6 tons for 12-month rolling time period ending April 2021; 12-month rolling PM-2.5 emissions were 8.8 tons for 12-	IN COMPLIANCE

		month rolling time period ending June 2022.	
5. NOx	102.4 tons per 12-month rolling time period	43.8 tons for 12-month rolling time period ending June 2022.	IN COMPLIANCE

II. Material Limits
1. IN COMPLIANCE. Natural gas usage was below the permit limit of 1,995 MM cubic feet per 12-month rolling time period. Highest total natural gas usage was 875 MM cubic feet for the 12-month rolling time period ending June 2022.

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. Testing to verify booth and oven capture efficiency of EU-GUIDECOAT and EU-TOPCOAT was performed the week of October 8-9, 2018, using the Mustang body as the test vehicle. Results showed the following capture efficiencies: Prime Booth = 84.1 %; Prime Oven (now Sealer Oven) = 10.6%; Basecoat Booth = 76.6%; Basecoat Oven (now Enamel Oven) = 11.6%; Clearcoat Booth = 40.6%; and Clearcoat Oven = 32.5%. Testing to verify the capture efficiency of EU-ECOAT was performed on December 11, 2018, using the Mustang body as the test vehicle. Results showed an Ecoat Oven capture efficiency of 98.8%.
2. IN COMPLIANCE. Testing to demonstrate compliance with the VOC emission rate and destruction efficiency of the RCO System was most recently performed on April 21, 2022, which demonstrated an average VOC outlet concentration of 2.3 ppm and a destruction efficiency of 96.1%. The values demonstrated compliance with both the permitted minimum of 95% destruction efficiency of the RTO System and the maximum VOC outlet concentration of 5 ppm, as allowed 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 8-9, 2018. Testing was performed using a Mustang body and demonstrated an average transfer efficiency for all three booths of 75.9%.

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 using emission factors determined at various facilities in 2011, as approved by AQD;
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. NOT APPLICABLE. No modifications have been made since the last full compliance evaluation.

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. NOT APPLICABLE. AQD has not been notified of any projects under FG-Facility, SCs IX.3 and 4 since the last full compliance evaluation.

IX. Other Requirements
1. NOT APPLICABLE. There have been no changes to operations subject to R.201 since ROP No. MI-ROP-N0929-2018a was issued on June 6, 2022.
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. AQD is not aware of the facility having installed or modified equipment or operations requiring an increase in the emission limits listed in FG-FACILITY I.1 through 5, resulting 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 from the electrocoat system, the paint spray booths, and curing ovens.

Associated Emission Unit IDs: EU-ECOAT, EU-GUIDECOAT, and 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-CONTROLS 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. The most recent OCM test was performed on April 20, 2022.

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 during planned shutdowns rather than perform annual verification, as part of the MAP for the FG-Controls.
6. IN COMPLIANCE. Bypass monitoring is performed on a continuous basis. 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. Facility takes timely corrective actions and minimizes emissions when any excursion or exceedance in emission limits or operating parameters is observed.
8. IN COMPLIANCE. All required monitoring and data recording are maintained when the emission units are in operation, except during times as allowed by this condition.
9. IN COMPLIANCE. Compliance with FG-CONTROLS SC VI.1 and VI.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). Excursions are reported as deviations in the annual and semiannual Title V compliance certifications.
2. IN COMPLIANCE. Facility complies with applicable requirements of 40 CFR Part 64.
3. NOT APPLICABLE. Facility has not identified a need to modify the CAM requirements to address changes in monitoring or data collection.

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-EXPORT WAX, EU-UNDERCOAT, and EU-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, SC I.2 to demonstrate compliance, as allowed in FG-AUTOMACT, SC 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. A review of records showed that the coatings used in FG-AutoMACT did not exceed 1.10 lb HAP/GACS in any calendar month during the compliance period.
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 HAPs 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 HAPs in the coatings used 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-AUTO MACT are compliant with the HAP limits in FG-AUTO MACT, SC I.1 through 4, so add-on controls are not required to demonstrate compliance.
3. NOT APPLICABLE. Add-on controls are not required to demonstrate compliance with the MACT; however, the facility has developed and implements a startup, shutdown, and malfunction plan (SSM Plan) in accordance with 40 CFR 63.6(e)(3).
4. NOT APPLICABLE. Add-on controls are not required to demonstrate compliance with the MACT; however, the facility operates and maintains FG-AUTO MACT in accordance with the provisions in 40 CFR 63(e)(1)(i).
5. NOT APPLICABLE. Add-on controls are not required to demonstrate compliance with the MACT; however, the facility maintains a log detailing the operation and maintenance of any emission capture system, control device, or continuous parameter. 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. NOT APPLICABLE. Facility has not requested to use results of previous capture, destruction, or transfer efficiency tests in lieu of required testing.
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 for the required time periods.
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 FG-AUTOMACT, SC 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 FG-AUTOMACT, SC 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 pressure 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-N0929-2018, 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.

Note: FG-PLASTIC MACT ceased operation in October 2017, so this emission unit was not evaluated during the inspection.

FG-BOILER MACT – This flexible group establishes the national emission limitations and work practice standards from industrial, commercial, and institutional boilers and process heaters located at major sources of HAPs as found in 40 CFR 63, Subpart DDDDD.
Associated Emission Units: EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EU-BOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EU-PLASTICSBOILER

III. Process/Operational Restrictions
1 and 2. IN COMPLIANCE. Facility certified that initial tune-ups for units subject to Subpart DDDDD was performed prior to January 31, 2016, and annually thereafter no more than 13 months from the previous test. Facility electronically submits a Notification of Compliance and Unit Tune-Up Compliance to U.S. EPA on an annual basis; the most recent notification was sent on January 27, 2022.
3. IN COMPLIANCE. Facility certified that the one-time energy assessment was performed as required in Table 3 of 40 CFR Part 63, Subpart DDDDD. Certification was performed prior to January 31, 2016.
4. IN COMPLIANCE. Facility operates the boilers in a manner consistent with good air pollution control practices for minimizing emissions. Compliance is maintained through following regular maintenance, monitoring, and inspection procedures.

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. NOT APPLICABLE. The facility has not installed or modified any equipment subject to 40 CFR Part 63, Subpart DDDDD since the initial notification was submitted on May 24, 2013.
5. IN COMPLIANCE. Facility electronically submits compliance reports to U.S. EPA on an annual basis by January 31 for the previous calendar year.

IX. Other Requirements
1. IN COMPLIANCE. The facility complies with the applicable provisions of 40 CFR Part 63, Subparts A and DDDDD, as required.

FG-CIRICEMACT - 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition RICE less than 500 bhp.

Associated Emission Units: EU-UTFPH-SOUTH, EU-UTFPH-MIDDLE, EU-UTFPH-NORTH, EUMSCFIREPUMP, and EUPAINTEMGEN

III. Process/Operational Restrictions
1. IN COMPLIANCE. Each engine in FG-CIRICEMACT is maintained and operated in a satisfactory manner following the recommended work practices specified in 40 CFR Part 63, Subpart ZZZZ Table 2c. Based on a review of operational records, the engines are operated for only a few hours per month for readiness testing and maintenance; no engine exceeded 52 hours of operation during a 12-month rolling time period and no engines were used for emergency use. All engines receive an inspection and oil change on an annual basis by a third-party; records are maintained for each inspection.
2. NOT APPLICABLE. Facility changes the oil annually rather than perform oil analysis.
3. IN COMPLIANCE. Each engine in FG-CIRICEMACT is maintained and operated in accordance with Ford's internal procedures based on manufacturer specifications.
4. IN COMPLIANCE. Facility minimizes startup time to less than 30 minutes.
5. IN COMPLIANCE. No engine in FG-CIRICEMACT exceeded 100 operating hours per calendar year for maintenance and readiness testing during the compliance period.
6. IN COMPLIANCE. No engine in FG-CIRICEMACT exceeded 50 operating hours per calendar year for non-emergency use.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Each engine in FG-CIRICEMACT is equipped with a non-resettable hour meter.

V. Testing/Sampling
1. NOT APPLIACABLE. Facility does not use the oil analysis program.

VI. Monitoring/Recordkeeping
1 and 2. IN COMPLIANCE. Facility maintains records of any malfunctions, actions taken to reduce emissions during malfunctions, and corrective actions taken. During the compliance period, the facility did not report any malfunctions.
3. IN COMPLIANCE. Facility maintains records to demonstrate continuous compliance with the operating limitations in FG-CIRICEMACT, SC III.3 for each engine.
4. IN COMPLIANCE. Facility maintains records of all maintenance conducted on each engine in FG-CIRICEMACT.
5. IN COMPLIANCE. Facility maintains records of the hours of operation of each engine in FG-CIRICEMACT on a monthly and 12-month rolling basis. This includes the total hours of operation at the start and end of each month and a breakdown of emergency hours and readiness testing/maintenance hours.

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. The facility has reported compliance with 40 CFR Part 63, Subpart ZZZZ in its annual and semiannual compliance certifications during the compliance period.

IX. Other Requirements
1. IN COMPLIANCE. During the compliance period, the facility certified compliance with all applicable provisions of 40 CFR Part 63, Subparts A and ZZZZ.

FG-SIRICEMACT - 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition RICE less than 500 bhp.

Associated Emission Units: EU-MSCEMGEN1 through EU-MSCEMGEN11, EULNCNTEMGEN, and EUPAINTEMGEN

III. Process/Operational Restrictions
1. IN COMPLIANCE. Each engine in FG-SIRICEMACT is maintained and operated in a satisfactory manner following the recommended work practices specified in 40 CFR Part 63, Subpart ZZZZ Table 2c. Based on operational records, the engines are operated for only a few hours per month for readiness testing and maintenance; no engine exceeded 52 hours of operation during a 12-month rolling time period and no engines were used for emergency use. All engines receive an inspection and oil change on an annual basis by a third-party; records are maintained for each inspection.
2. NOT APPLICABLE. Facility changes the oil annually rather than perform oil analysis.
3. IN COMPLIANCE. Each engine in FG-SIRICEMACT is maintained and operated in accordance with Ford's internal procedures based on manufacturer specifications.
4. IN COMPLIANCE. Facility minimizes startup time to less than 30 minutes.
5. IN COMPLIANCE. No engine in FG-SIRICEMACT exceeded 100 operating hours per calendar year for maintenance and readiness testing during the compliance period.
6. IN COMPLIANCE. No engine in FG-SIRICEMACT exceeded 50 operating hours per calendar year for non-emergency use.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Each engine in FG-SIRICEMACT is equipped with a non-resettable hour meter.

V. Testing/Sampling
1. NOT APPLIACABLE. Facility does not use the oil analysis program.

VI. Monitoring/Recordkeeping
1 and 2. IN COMPLIANCE. Facility maintains records of any malfunctions, actions taken to reduce emissions during malfunctions, and corrective actions taken. During the compliance period, the facility did not report any malfunctions.
3. IN COMPLIANCE. Facility maintains records to demonstrate continuous compliance with the operating limitations in FG-SIRICEMACT, SC III.3 for each engine.
4. IN COMPLIANCE. Facility maintains records of all maintenance conducted on each engine in FG-SIRICEMACT.
5. IN COMPLIANCE. Facility maintains records of the hours of operation of each engine in FG-SIRICEMACT on a monthly and 12-month rolling basis. This includes the total hours of operation at the start and end of each month and a breakdown of emergency hours and readiness testing/maintenance hours.

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. The facility has reported compliance with 40 CFR Part 63, Subpart ZZZZ in its annual and semiannual compliance certifications during the compliance period.

IX. Other Requirements

1. IN COMPLIANCE. During the compliance period, the facility certified compliance with all applicable provisions of 40 CFR Part 63, Subparts A and ZZZZ.

FG-500HPCIRICEMACT - 40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition RICE greater than 500 bhp.

Associated Emission Units: EU-PAINTEMGEN

III. Process/Operational Restrictions
1. IN COMPLIANCE. No engine in FG-500HPCIRICEMACT exceeded 100 operating hours per calendar year for maintenance and readiness testing during the compliance period.
2. IN COMPLIANCE. No engine in FG-500HPCIRICEMACT exceeded 50 operating hours per calendar year for non-emergency use.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. Facility maintains records of the hours of operation of each engine in FG-500HPCIRICEMACT on a monthly and 12-month rolling basis. This includes the total hours of operation at the start and end of each month and a breakdown of emergency hours and readiness testing/maintenance hours.

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. The facility has reported compliance with 40 CFR Part 63, Subpart ZZZZ in its annual and semiannual compliance certifications during the compliance period.

IX. Other Requirements
1. IN COMPLIANCE. During the compliance period, the facility certified compliance with all applicable provisions of 40 CFR Part 63, Subparts A and ZZZZ.

FG-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.

Associated Emission Units: EU-BOILER62013, EU-BOILER62018, EU-BOILER62019, EU-BOILER62026, EUBOILER62575, EU-BOILER62136, EU-BOILER62145, EU-PEBOILER1, EU-PEBOILER2, and EUPLASTICSBOILER

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-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 facility management, 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), SC VII.1 through 3.

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

The only emission unit subject to FG-Rule290 is an aluminum shredder, which is controlled by a cyclone. Aluminum dust generated during shredding is not considered to be a toxic air contaminant, by definition, at Rule 120(f)(ii), and does not have either an established IRSL or ITSL.

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 19.6 pounds in December 2021.

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.

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.

SECTION 2 – Enterprise Data Center 2

Ford Motor Company - Enterprise Data Center 2 was issued Permit to Install No. 122-17 on March 22, 2018. This permit was incorporated into ROP No. MI-ROP-N0929-2018a as Section 2 during the June 6, 2022 revision.

Enterprise Data Center 2 is also subject to the following federal regulations:

FGENGINES is subject to New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines as promulgated in 40 CFR Part 60, Subpart IIII.

FGENGINES is subject to National Emission Standards for Hazardous Stationary Reciprocating Internal Combustion Engines as promulgated in 40 CFR Part 63, Subpart ZZZZ.

Records from October 2019 through August 2022 were reviewed for the purpose of determining compliance during this evaluation. Some of these records can be found in the orange facility file; others were reviewed on site.

ROP No. MI-ROP-N0929-2018a – Section 2, applicable conditions:

D. FLEXIBLE GROUP CONDITIONS

FGENGINES – Flexible group containing eleven diesel-fueled emergency engines.

Associated Emission Units – EUENGINE01, EUENGINE02, EUENGINE03, EUENGINE04, EUENGINE05, EUENGINE06, EUENGINE07, EUENGINE08, EUFIREPUMPENGS, EULIFESAFETYENG. Note: There are two engines in EUFIREPUMPENGS.

I. Emission Limits
1. IN COMPLIANCE. EUENGINE01 through EUENGINE08 are assumed to be in compliance with the NMHC + NOx limit of 6.4 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
2. IN COMPLIANCE. EUENGINE01 through EUENGINE08 are assumed to be in compliance with the NOx limit of 42.6 pph (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
3. IN COMPLIANCE. EULIFESAFETYENG is assumed to be in compliance with the NMHC + NOx limit of 4.0 g/kW-hr (each engine) through manufacturer certification and proper maintenance of the engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
4. IN COMPLIANCE. EULIFESAFETYENG is assumed to be in compliance with the NOx limit of 8.47 pph (each engine) through manufacturer certification and proper maintenance the engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
5. IN COMPLIANCE. EUFIREPMPENGS are assumed to be in compliance with the NMHC + NOx limit of 3.0 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
6. IN COMPLIANCE. EUFIREPUMPENGS are assumed to be in compliance with the NOx limit of 2.8 (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
7. IN COMPLIANCE. FGENGINES did not exceed the permit limit of 88 tons of NOx emissions per 12-month rolling time period during the compliance period. The facility reported 6.4 tons of NOx emissions for the 12-month rolling time period ending in August 2022.

8. IN COMPLIANCE. EUENGINE01 through EUENGINE08 are assumed to be in compliance with the CO limit of 3.5 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
9. IN COMPLIANCE. EULIFESAFETYENG is assumed to be in compliance with the CO limit of 3.5 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
10. IN COMPLIANCE. EUENGINE01 through EUENGINE08 are assumed to be in compliance with the PM limit of 0.20 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
11. IN COMPLIANCE. EULIFESAFETYENG is assumed to be in compliance with the PM limit of 0.20 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.
12. IN COMPLIANCE. EUFIREPUMPENGS are assumed to be in compliance with the PM limit of 0.20 g/kW-hr (each engine) through manufacturer certification and proper maintenance of each engine as required by 40 CFR Part 60, Subpart IIII, as allowed in FG-ENGINES, S.C. V.1.

II. Material Limits
1. IN COMPLIANCE. Facility only burns fuel in FGENGINES with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. Fuel specifications were provided by the supplier, DTE, and reviewed during the inspection. Fuel specifications showed a sulfur content of 0.0010 percent and Cetane index at or above 40.

III. Process/Operational Restrictions
1. IN COMPLIANCE. The facility did not operate any engine in FGENGINES for more than 500 hours per 12-month rolling time period. The 500-hour limit includes the hours used for the purpose of maintenance checks and readiness testing. The highest total hours of operation for the 12-month rolling time period ending August 2022 for any engine was 38.2 hours. All reported hours of operation for each engine in FGENGINES was for readiness testing. There were no emergency or non-emergency hours of operation were reported for any engine during the time period.
2. IN COMPLIANCE. The facility did not operate any engine in FGENGINES for more than 100 hours per 12-month rolling time period for the purpose of maintenance and readiness testing, including hours of non-emergency situations. The highest hours of operation for the 12-month rolling time period ending August 2022 for any engine was 38.2 hours. All reported hours of operation for each engine in FGENGINES was for readiness testing. There were no non-emergency hours of operation reported for any engine during the time period.
3. IN COMPLIANCE. The did not operate any engine in FGENGINES for more than 50 hours in non-emergency situations. There were no non-emergency hours of operation reported for any engine in FGENGINES.
4. IN COMPLIANCE. Each engine in FGENGINES is certified by the manufacturer and operated and maintained in accordance with the manufacturer's emission-related instructions, as required. No emission-related changes have been made to any of the engines in FGENGINES.
5. NOT APPLICABLE. All engines in FGENGINES are certified by the manufacturer.

IV. Design/Equipment Parameters
1. IN COMPLIANCE. Each engine in FGENGINES is equipped with a non-resettable hour meter to track operating hours.
2. IN COMPLIANCE. Each engine in FGENGINES is installed, maintained, and operated in accordance with the manufacturer's emission-related specification.

V. Testing/Sampling
1. IN COMPLIANCE. Each engine in FGENGINES is certified by the manufacturer and is property maintained in accordance with manufacturer's specifications and as required by 40 CFR Part 60, Subpart IIIII. As such, performance testing of each engine is not required.

VI. Monitoring/Recordkeeping
1. IN COMPLIANCE. The facility maintains emission calculations on a monthly basis, as required.
2. IN COMPLIANCE. The facility maintains manufacturer certification documentation indication each engine in FGENGINES meets the applicable requirements of 40 CFR Part 60, Subpart IIII.

3. IN COMPLIANCE. The facility monitors and records the total hours of operation and hours of operation in non-emergency situations for each engine in FGENGINES on a monthly and 12-month rolling time period basis, as required. Records were provided to AQD staff at the time of inspection.
4. IN COMPLIANCE. The facility maintains fuel certification records of each delivery of fuel used in FGENGINES demonstrating the fuel meets the requirements of 40 CFR 80.51(b).

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. NOT APPLICABLE. Performance testing has not been performed on any engine in FGENGINES.

VIII. Stack/Vent Restrictions
1 through 10. IN COMPLIANCE. According to facility documentation, stacks SVENGINE01, SVENGINE02, SVENGINE03, SVENGINE04, SVENGINE04, SVENGINE05, SVENGINE06, SVENGINE07, SVENGINE08, SVFIREPUMPENGINES (each engine), and SVLIFESAFETYENG meet permit specifications.

IX. Other Requirements
1. IN COMPLIANCE. Facility complies with the provisions of 40 CFR Part 60, Subparts A and IIII, as they apply to FGENGINES.
2. IN COMPLIANCE. Facility complies with the provisions of 40 CFR Part 63, Subparts A and ZZZZ, as they apply for FGENGINES.

FINAL COMPLIANCE DETERMINATION:
At the time of inspection, FRAP was determined to be in substantial compliance with ROP No. MI-ROP-N0929 -2018a, Sections 1 and 2, and applicable State and federal regulations.

The previous issues with unresolved violations of Rule 901 noted in the most recent full compliance evaluations are now considered to be resolved.

NAME _____ DATE 6-4-24 SUPERVISOR JK