

A8650
MANILA

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

A865045010

FACILITY: FORD MOTOR CO/ WAYNE COMPLEX		SRN / ID: A8650
LOCATION: 37625 MICHIGAN AVE, WAYNE		DISTRICT: Detroit
CITY: WAYNE		COUNTY: WAYNE
CONTACT: John Nowak , Environmental Representative		ACTIVITY DATE: 05/01/2018
STAFF: Stephen Weis	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Compliance inspection of the Ford Motor Company Michigan Assembly facility in Wayne. The Ford Michigan facility is scheduled for inspection in FY 2018.		
RESOLVED COMPLAINTS:		

Location:

Ford Motor Company
Michigan Assembly Plant (A8650)
38303 Michigan Avenue
Wayne 48184

Date of Activity:

Tuesday, May 1, 2018

Personnel Present:

Steve Weis, DEQ-AQD Detroit Office
John Nowak, Environmental Control Engineer, Ford Motor Company – Michigan Assembly Plant
Crystal Dolence, Plant Environmental Control Engineer, Ford Motor Company – Michigan Assembly Plant
Kim Cole, Ford Motor Company

Purpose of Activity

A self-initiated inspection of the Ford Motor Company Michigan Assembly Plant facility (hereinafter "Michigan Assembly") was conducted on Tuesday, May 1, 2018. The Michigan Assembly facility was on my list of sources targeted for an inspection during FY 2018. The purpose of this inspection was to determine compliance of operations at the Ford Michigan facility with applicable rules, regulations and standards as promulgated by Public Act 451 of 1994 (NREPA, Part 55 Air Pollution Control), and with applicable Federal standards. The facility is also subject to the terms and conditions of Renewable Operating Permit (ROP) No. MI-ROP-A8650-2016, which became effective on September 28, 2016.

Facility Site Description

The Michigan Assembly facility is located in the City of Wayne. The facility property stretches along the south side of Michigan Avenue starting just east of John Hix Road, extending east approximately 1.25 miles to the CSX railroad right-of-way just west of downtown Wayne. The assembly portion of the facility fills up the area between Michigan Avenue and the Norfolk Southern railroad right-of-way to the south. There is also a stamping portion of the facility that is contiguous to the assembly portion; it is located to the south of the Norfolk Southern railroad right-of-way, and to the east of Cogswell Road extending south to Van Born Road. According to Ford Motor Company's website, the Michigan Assembly facility is a 369-acre site, and the current building/plant size is 5,000,000 square feet. It was mentioned during a past site visit that the entire facility property is 523 acres in size.

The area surrounding the facility is largely residential - there is a small residential area directly to the west of the facility; the more densely populated portions of the City of Wayne to the east and southeast of the facility; and residential areas approximately ¼ mile to the north of the facility. Areas along Michigan Avenue and to the south of the facility are a mix of commercial and light industrial properties.

A facility map is attached to this report that shows the footprint of the Michigan Assembly facility, including its location relative to Wayne.

Facility Operations

The Michigan Assembly facility first began operating in 1952 with the opening of the Ford Wayne Stamping and Assembly Plant. Starting in 1957, the facility became a complex that consisted of two assembly plants – Wayne Assembly and Michigan Truck - and a stamping plant. The Michigan Truck Plant, which was located on the western part of the assembly portion of the facility, assembled vehicles ranging from the Bronco to the Expedition and Lincoln Navigator. The Wayne Assembly Plant, which is located to the east of the Michigan Truck building, produced vehicles ranging from various full-size Ford and Mercury sedans in the early years of the facility to the Ford Escort, which was eventually replaced by the Focus.

The Wayne Assembly portion of the facility was permanently idled in terms of automotive assembly/vehicle production on December 3, 2010. The Michigan Truck portion of the facility, which had been previously idled in late 2008, was upgraded and reconfigured to allow for the production of the Ford Focus, as well as the Ford C-Max hybrid vehicle. Michigan Truck, renamed Michigan Assembly, recommenced operations during the 2011 calendar year, with the first saleable job produced on February 3, 2011. All of the assembly and coating operations/emission units associated with the Wayne Assembly portion of the facility have been permanently removed from the facility, and aside from some parts sequencing and a small sub-assembly operation, which take place at the far west end of the Wayne Assembly building, the rest of the building is empty.

The Michigan Assembly facility is scheduled for an extended shutdown from May 2018 through November 2018. The shutdown serves to accommodate another vehicle model changeover at the facility. The Focus and C-Max are ceasing production at the facility (some of the last of these vehicles were being produced at the time of my site visit at a low production volume). The Michigan Assembly facility is to begin production of the Ranger pick-up truck when production resumes in November 2018. The Ford Bronco sport-utility vehicle will also eventually be assembled at this Michigan Assembly facility. The retrofitting process to modify the area of the facility where the Bronco will be assembled is scheduled to commence in late Summer/Fall of 2019.

As of the time of my site visit, the Ford Michigan Assembly facility currently consists of the Michigan Assembly Plant, which was producing the Ford Focus and C-Max vehicles, and is producing the Ranger pick-up truck as of November 2018; the Wayne Stamping Plant, where body components are stamped and assembled prior to being moved to Michigan Assembly for final assembly and painting; the building that formerly contained the Wayne Assembly operations, which is currently being used to sequence parts prior to assembly, as well as to perform sub-assembly operations for Ford vehicles that are produced in other facilities; and the powerhouse, which contains boilers to provide steam and heat for the facility.

From the perspective of air quality regulations, the Wayne Stamping portion of the facility involves processes and equipment that are exempt from DEQ-AQD permitting requirements; this portion of the facility involves equipment that stamps metal into automobile body components (exempt per the provisions of Administrative Rule 285(l)(i)), and assembles the stamped body components, which includes welding (exempt per Rule 285 (i)). Similarly, the activities and processes taking place in the former Wayne Assembly building are also exempt from DEQ-AQD permitting requirements. The Wayne Stamping and Wayne Assembly portions of the facility are included in the facility's ROP, making up the FG-WAYNEFACILITY Flexible Group. This Flexible Group incorporated the requirements of Permit to Install No. 139-15, which was issued for the purpose of addressing and limiting natural gas usage for these two buildings.

The processes and emission units associated with the Michigan Assembly Plant portion of the facility and the powerhouse are subject to a variety of air quality regulations, and they are addressed in the facility's permits. The following is a listing of the process equipment that is included in the Ford Michigan facility's current DEQ-AQD permits:

- EU-PHOSPHATE – a series of rinse, dip and spray wash tanks that pretreat the vehicle body surface prior to E-coat. The wash tanks are heated by two phosphate boilers, each rated at 16.75 MMBTU/hr.
- EU-ECOAT – a prime coat operation that applies the coating in an electrodeposition tank, which is followed by a curing oven and a dry scuff filter booth. Emissions from EU-ECOAT are controlled by a regenerative thermal oxidizer.
- EU-SEALERS – booths and work stations in which various sealers are applied to the vehicle bodies, followed by a curing oven.
- EU-GUIDECOAT – paint booths/coating lines that involve the manual and automatic application of

guidecoat material (anti-chip, exterior primer surfacer, and door frame and pillar blackout). Emissions from the guidecoat area are vented to carbon concentrators followed by a regenerative thermal oxidizer.

- EU-TOPCOAT – paint booth/coating lines that involve manual and automatic topcoat spray application and curing conducted in two parallel topcoat spray booths (Nos. 1 and 2) followed by two parallel topcoat ovens (Nos. 1 and 2) and a single dry filter topcoat scuff booth. This operation may be conducted either as a stand-alone topcoat operation or in conjunction with EU-Guidecoat in so-called 3-Wet (Topcoat) booths. Emissions from the topcoat booths are vented to carbon concentrators followed by a regenerative thermal oxidizer, and emissions from the topcoat ovens are vented to a regenerative thermal oxidizer.
- EU-MISCCOAT – miscellaneous coating operations that include black out and cavity wax, glass installation and final repair. Dry filter particulate controls are in place on the spray booth portions of this equipment.
- EU-PURGE&CLEAN – this emission unit covers the solvents used to clean and purge the paint system and Ford Michigan. The emission unit also includes a solvent recovery system to recover solvents used in the purging of the automatic paint spray applicators. Usage of clean-up solvents in the controlled portions of the coating lines is controlled by those coating line's associated emission control equipment.
- EU-FLUIDFILL – the storage and handling of fluids that are put into vehicles, including power steering fluid, antifreeze, transmission fluid, engine oil, windshield washer fluid, refrigerant, and gasoline.
- EU-GASOLINETANKS – two 20,000 gallon capacity underground storage tanks that are used to store gasoline for vehicles that are produced at the facility. The tanks are equipped with conservation vents.
- EU-BOILER#1, EU-BOILER#2, EU-BOILER#3, EU-FHBOILER – boilers used at the facility to provide steam and heat. Boilers 1-3 are located in the facility's boiler house, and they are capable of firing natural gas or landfill gas. The other boiler is referred to as the filterhouse boiler.
- EU-ISAFP#1WEST EU-ISAFP#2EAST, EU-WAPDIESEL, EU-FIREPUMP#1, EU-FIREPUMP#2 – diesel-fired emergency fire pumps.

There are other, smaller regulated processes at the facility. There are some cold cleaners/parts washers that are included in the FGCOLDCLEANERS Flexible Group; a marking ink application process that is exempt from permitting per the provisions of Administrative Rule 287(c), and that is included in the FGRULE287(c) Flexible Group; and processes that are exempt from permitting per the provisions of Administrative Rule 290 that are included in the FGRULE290 Flexible Group.

Inspection Narrative

I arrived at the facility at 9:13am. I was met by John Nowak at the main entrance to the office portion of the facility, and we proceeded to his office where we were joined by Crystal Dolence and Kim Cole.

We started my site visit by discussing the current operating status of the Michigan Assembly facility, as well as the timeline for the preparation for and production of the new model vehicles to be produced at the facility. I was provided with the following information:

- The last day of production for the Focus and the C-Max was to be Thursday, May 3, 2018.
- On May 4, the auto assembly portion of the facility was scheduled to begin the retrofitting and demolition process. I was told that 90% of the body shop was going to be gutted to allow for the changes necessary to assemble the new model of vehicles. I inquired about asbestos. John told me that is no asbestos in the body shop area. He said that there is some asbestos in the former Wayne Assembly portion of the facility; this portion of the facility is surveyed every year, and when asbestos containing material is abated/removed, he said that notifications are submitted.

- The Wayne Stamping operations and the portion of the Wayne Assembly building that is being used for vehicle sub-assembly operations (this portion is referred to as North Assembly/Stamping at the facility) will continue operating uninterrupted. These operations are producing parts for the F-Series pick-ups, the Fusion and the Escape, which are assembled at other facilities.
- In the final assembly area of Michigan Assembly, there will be a 50% tear-out for the retrofit.
- There will be no changes made in the windshield installation process.
- In the paint shop area, the sealer line is going to be extended. John mentioned that the sealers that are used are low VOC and low HAP content.
- In the coating booths, there will be no change in the robots to produce the Ranger. I was told that for the Ranger, the booths will stay the same, but the line run speed will be slightly slower, resulting in less jobs per hour.
- The wheel well blackout booth will be reactivated.
- The air pollution control/abatement equipment will be refurbished during the idle period. This will include replacing valves and carbon.
- Ford is changing the coating supplier for the facility from Axalta/DuPont to BASF.
- Ford is to commence the retrofitting operations to accommodate production of the Ford Bronco at the facility in late Summer/Fall of 2019. John said that the enamel line robots will be redone for Bronco production. It is anticipated that there will be two shifts of Ranger production and one shift of Bronco production.

We discussed recent odor complaints that alleged the Michigan Assembly facility as the source of the odor. There were two complaints received in April 2018, the most recent to the site visit having been made on April 28. John and Crystal described the odor surveillance procedures that they have been following. Staff from their group (including them) perform odor surveillance during their work hours, driving and surveying along the perimeter of the facility. There is a wind sock located in the front of their office building that they can look at to check the wind direction. The surveys are also conducted in the residential neighborhood directly to the west of the facility. We discussed the sludge recovery pits that are located outside, at the northeast quadrant of the Michigan Assembly building. John told me that the contractor that cleans the pits, Abednego, was going to be out to clean the pits, taking advantage of the operational shutdown at the facility. He said that the clean-up typically takes 3-4 days. Since the clean-up activities could result in a higher potential for paint-like odors, John and Crystal said that they and their staff would be surveying for odors while the pits were being cleaned out.

We then discussed and reviewed the records that facility staff keep to demonstrate compliance with the facility's permits. John showed me his files for 2018, and I choose to look at the records for February 2018. The records are tracked and kept via Ford's internal Permit Information Archive (PAI) Report. John provided me with a copy of the PAI report for February 2018, which is attached to this report for reference.

John first showed me the control equipment downtime report. He explained that this information, along with other plant information, is entered into the Plant Emissions Reporting System, or PERS, which is a Ford database that captures and records information including material usage, parts/vehicles produced, and emissions. There were no periods of control equipment downtime in February.

John explained how the daily records are put together. Production is currently taking place over two, 10-hour shifts. Production is tracked on a calendar log. He then showed me the log of vehicle units that have gone through final repair. The operator keeps track of the number of vehicles/units that are repaired on a daily basis. There were 167 such units in February 2018.

We looked at the E-Coat logs. The facility is still using Axalta to supply the eletrocoatings, and Axalta tracks the usage on a daily basis and supplies the records for John's group. John told me that there are two coatings used – ES27, which is the original lead-free E-Coat material that was used at the facility, and EC6000, which is a new coating. Axalta tracks the pigment, resin, and FCA content of the E-Coat.

We then reviewed the solvent usage records. John told me that Gage Products handles the facility's solvents. The solvents are used for cutting coatings, and for cleaning (including the cleaning of the coating

lines). John said that there is also one solvent that is used at the Wayne Stamping called Chemico2000). I was told that Gage collects spent solvent and scrap paint every 90 days, and that the waste tanks are also cleaned every 90 days.

I was shown the facility records for sealer usage and windshield installation. The sealers are supplied by Eftec, who also monitors the daily and monthly usage of sealer materials and reports the information to John's group. The facility tracks the use of the urethane and the one-step primer that are used to install the windshields.

We briefly looked over the facility's natural gas usage records. Natural gas usage is recorded on an individual meter basis. Natural gas usage information is included with the facility's monthly emission reports, which are submitted to DEQ-AQD each calendar quarter. We discussed the power house, and I was told that as of May 8, 2017, landfill gas was no longer being fired in the engines.

We discussed the coating records. I was told that pour sheets are kept to track the daily usage of paint and cutting solvents. The data from the pour sheets is input to PERS, after which the analytical data for each of the coatings is entered in PERS. Under the operations at the time of my site visit, Axalta was performing analyses of the coatings every month.

We then discussed the air pollution control/abatement equipment. For the carbon wheels on Enamel Lines 1 and 2, Abednego does a daily carbon check, and monitors the pressure drop across the carbon bed. A monthly report titled "Visual Inspection Form" that summarizes the daily inspections is completed by Abednego. The regenerative thermal oxidizer (RTO) calibrations are done in July of each year. I was provided with a copy of the 2017 Calibration Reports document for the RTO, which is attached to this report for reference.

Regarding the activities at the facility that fall under the FG-Rule 287(c) flexible group, I was told that the usage of all of the subject materials is tracked. For printing ink, the material usage is tracked using the requisitions for the material, as there is not a practical way to measure the ink as it is applied. There is a sealer referred to as 410A that is of a limited use to qualify for the exemption. The usage of this material is recorded, and the information is provided to Crystal.

For the diesel-fired engines that are subject to the RICE MACT, John told me that the facility's security staff maintain the records of engine usage, logging the hours of operation for each engine. The records for the engines include a log of the hours of operation, and a description of the reason that the engine was run. I was provided with the most recent records for the engines, which are attached to this report for reference.

We discussed the Boiler MACT requirements, and I was shown records of some of the boiler inspections and tune-ups required by the regulation. We briefly discussed the facility greenhouse gas (GHG) Monitoring Plan. I was told that an inventory of the entire facility is performed each year, with the information reported to EPA.

The group of us then left the office area and walked around portions of the facility. We began by walking around the paint sludge recovery pits. I was told that the pits are cleaned every other year. During the cleaning process, 100-120 tons of materials is removed from the pits. The contents are transferred to the holding side (the west pit), and a biocide is added. John said that the biocide addition can cause a noticeable, localized odor at first, but that the odor subsides. Inside of the building, the material is dried for offsite disposal at Covanta in Indianapolis. The pits have a capacity of 320,000 gallons, and the paint shop uses 18 million gallons of water per month.

We then went inside of the Michigan Assembly building, and we walked along the "3 wet", or "3 coat" paint line – here, the vehicle bodies are coated with prime coat, enamel (or base coat) and clearcoat. The different coatings in the 3-coat system are applied robotically, with manual zones as back-up. There are two 3 coat coating application lines, referred to as Enamel #1 and Enamel #2. Both lines are "U", or horseshoe-shaped, with the vehicle bodies being directed along the coating line to receive prime, base and clearcoat. The prime and base coat are applied on the first arm, followed by the clear coat application on the opposite arm of the "U". After the three coatings are applied, the vehicle body enters a curing oven to set the coatings; each Enamel line has an associated curing oven. As we were walking along the coating line, it was pointed out to me that four of the robots and applicators in the prime coat application area will remain the same with the production of the Ranger. I was told that the coating line will run slower for the Ranger production; this is due to the Ranger having more surface area to coat than the Focus and C-Max vehicles, and to ensure that the nooks and crannies associated with the Ranger receive the necessary coating.

During this site visit, due to the pending idling of the plant and the low production volume (one line was idled), we

did not walk along the phosphate cleaning process, the e-coat line, the sealer line

After walking through the Michigan Assembly Building, we toured the Wayne Assembly building. We went through the westernmost part of the building that is being used to store and sequence parts, to store parts racks, and where a small sub-assembly operation takes place that involves some welding in which body components for vehicles at other Ford facilities are assembled. At the time of my visit the sub-assembly process referred to as 410A was in operation; this process is used to produce the roof rail and the floor pan assembly for the Ford F-150 truck, which is assembled at Ford's Dearborn Assembly Plant.

After some closing discussion, I left the facility at 1:20pm.

Permits/Regulations/Orders/Other

Permits

The Ford Michigan facility currently has a ROP and an active DEQ-AQD Permit to Install (PTI), No. 192-17. PTI No. 192-17 was issued on August 15, 2018, so that permit was not evaluated or discussed as part of the May 1, 2018 site visit that is the subject of this report. PTI No. 192-17 introduces new facility-wide emission limitations in the FG-FACILITY Flexible Group for PM₁₀, PM_{2.5}, NO_x, CO, SO₂ and greenhouse gases (GHGs as CO₂e). There are compliance tests scheduled for 2019 in accordance with the testing requirements in the PTI.

Regarding the ROP, the facility submits extensive records, including material usage and emissions calculations, as part of their semi-annual and annual Renewable Operating Permit Report Certifications, as well as the quarterly submittals that summarize monthly emission reports for VOC and particulate matter. These records are used to verify the throughput and emissions information submitted as part of the facility's MAERS submittal, and they are also used to demonstrate the facility's compliance with permit limits. The following is a summary of Ford Michigan's compliance with their permit.

ROP No. MI-ROP-A8650-2016

ROP No. MI-ROP-A8650-2016 was issued to the Ford Michigan facility with an effective date of September 28, 2016.

The following paragraphs provide a description of the Ford Michigan facility's compliance with the terms and conditions put forth by the ROP, with the headings representing the sections of the ROP. For the ROP, many of the requirements that used to be found in the Emission Unit tables are now found in the various Flexible Group tables. This was done in an effort to group the like requirements of the Federal regulations that the various emission units that make up the automotive coating operation at the Ford Michigan facility are subject to, as well as to consider the common control equipment that serves multiple emission units.

Source-Wide Conditions

There are no requirements in the Source-Wide conditions section of this ROP. There is a Flexible Group, FG-Facility, that puts forth some source/facility-wide requirements.

Emission Unit tables

EU-PHOSPHATE

This Emission Unit represents the process through which vehicle surfaces are pretreated prior to e-coating. This Emission Unit includes two phosphate boilers, and the equipment is included in the FG-FACILITY and FG-BOILERMACT Flexible Groups.

There are no emission or material limits associated with this Emission Unit table.

Special Condition III.1 requires that the heat input capacity of each of the hot water heaters (also known as the phosphate boilers, Phosphate #1 and Phosphate #2) not exceed 99.9 MMBTU/hour. The rated capacity of each boiler is 16.75 MMBTU/hour, so the boilers are **compliant** with this requirement.

The only other permit conditions relate to reporting requirements, which the facility is complying with, and stack parameters. The stack parameters were not verified during this site visit. It is assumed that the stack parameters that were included in the ROP renewal application, and which appear in the permit, are accurate. The boilers are

compliant with the applicable provisions of 40 CFR Part 60, Subpart Dc, which satisfies the requirement of SC IX.1.

EU-ECOAT

This Emission Unit represents the e-coat prime coat operations, which include the electrodeposition tanks, curing oven and dry filter scuff booth. Air emissions from the operation of this process equipment are controlled by a regenerative thermal oxidizer (RTO#1) and dry filter particulate controls on the scuff booth. The equipment and operations in EU-ECOAT are included in the FG-FACILITY, FG-CONTROLS and FG-MACT Flexible Groups.

There are no emission or material limits associated with this Emission Unit table.

IV. Design/Equipment Parameters

During the inspection, I was shown records from the chart recorders for the RTOs used at the facility. It was explained to me how the three-hour average temperature is monitored against the 1400°F requirement, and I was told how the temperature monitoring system communicates temperature issues. (IV.1)

In accordance with conditions VI.2 and VI.3 in FG-FACILITY, the particulate control filters in the scuff booth are inspected weekly and records are kept of the inspections (IV.2).

V. Testing/Sampling

The e-coat material is analyzed by the supplier, Axalta, who also tracks the records of material usage and provides the information to Ford. Axalta analyzes the e-coat material for VOC content, the physical properties of the resin, pigment and additives on a daily basis, and they provide this information to the facility environmental staff for tracking.

The facility is complying with the reporting requirements in this section, and while the stack dimensions were not verified, it is assumed that the stack parameters that were included in the ROP renewal application, and which appear in the permit, are accurate.

EU-SEALERS

This Emission Unit represents the various sealers that are applied to the vehicle bodies. The vehicle bodies pass through a sealer curing oven to cure the applied sealers. The equipment and operations in EU-SEALERS are included in the FG-FACILITY and FG-MACT Flexible Groups.

There are no emission or material limits associated with this Emission Unit table.

V. Testing/Sampling

As mentioned previously in this report, Eftec currently supplies the sealers, and they monitor the daily and monthly usage of sealer materials. The facility is provided with the VOC content of the sealers; this information is used to calculate the monthly VOC emissions. **Compliance.**

The facility is complying with the reporting requirements in this section, and while the stack dimensions were not verified, it is assumed that the stack parameters that were included in the ROP renewal application, and which appear in the permit, are accurate.

EU-GUIDECOAT

This Emission Unit represents the guide/prime coat application, which operates as part of the "3-Wet" system. Emissions are vented to carbon concentrators followed by one of the RTOs; the automatic sections of the guidecoat booth are controlled by RTO#3, and emissions from the curing oven are controlled by RTO#2. The equipment and operations in EU-GUIDECOAT are included in the FG-FACILITY, FG-CONTROLS and FG-MACT Flexible Groups

There are no emission or material limits associated with this Emission Unit table.

IV. Design/Equipment Parameters

During the inspection, I was shown records from the chart recorders for the RTOs used at the facility. It was demonstrated how the three-hour average temperature is monitored against the 1400°F requirement, and I was told how the temperature monitoring system communicates temperature issues. (IV.1)

In accordance with conditions VI.2 and VI.3 in FG-FACILITY, the water wash particulate control system in the paint booth is inspected weekly and records are kept of the inspections (IV.2). The facility is **in compliance** with both of the conditions in this section.

V. Testing/Sampling

At the time of my site visit, the procedure for verifying the properties of the coatings, including the VOC content, were the same as during last site visit, with Axalta as the supplier of the coatings. Recall that for the production of the Ranger and the Bronco, BASF will be the coating supplier. At time of my visit, the facility was tracking the VOC content and physical properties of the coatings used in this emission unit (V.1) via the supplier of the coatings, Axalta, who supplies a Certificate of Analysis to facility environmental staff on a monthly basis. **Compliance.**

Regarding the requirement to test the transfer efficiency and capture efficiency of the coating lines, the last such test was performed in April 2011. This was done after the coating lines were reconfigured to the "3 wet" system, and also corresponded to the production of the new vehicle models at that time, the Focus and the C-Max. The coating line has not changed since these tests were last performed. The facility is considered **compliant** with the requirements of conditions V.2 and 3 at the time of the site visit.

The facility is complying with the reporting requirements in this section, and while the stack dimensions were not verified, it is assumed that the stack parameters that were included in the ROP renewal application, and which appear in the permit, are accurate.

EU-TOPCOAT

This Emission Unit represents the two topcoat spray application lines, associated curing ovens and single dry filter topcoat scuff booth. Emissions are vented to carbon concentrators followed by one of the RTOs; the automatic sections of topcoat booth #1 are controlled by RTO#3; the automatic sections of topcoat booth #2 are controlled by RTO#4 , and emissions from the oven are controlled by RTO#2. The equipment and operations in EU-TOPCOAT are included in the FG-FACILITY, FG-CONTROLS and FG-MACT Flexible Groups

There are no emission or material limits associated with this Emission Unit table.

IV. Design/Equipment Parameters

During the inspection, I was shown records from the chart recorders for the RTOs used at the facility. It was demonstrated how the three-hour average temperature is monitored against the 1400°F requirement, and I was told how the temperature monitoring system communicates temperature issues. (IV.1)

In accordance with conditions VI.2 and VI.3 in FG-FACILITY, the water wash particulate control system in the paint booth is inspected weekly and records are kept of the inspections (IV.2). The facility is **in compliance** with both of the conditions in this section.

V. Testing/Sampling

At the time of my site visit, the procedure for verifying the properties of the coatings, including the VOC content, were the same as during last site visit, with Axalta as the supplier of the coatings. Recall that for the production of the Ranger and the Bronco, BASF will be the coating supplier. At time of my visit, the facility was tracking the VOC content and physical properties of the coatings used in this emission unit (V.1) via the supplier of the coatings, Axalta, who supplies a Certificate of Analysis to facility environmental staff on a monthly basis. **Compliance.**

Regarding the requirement to test the transfer efficiency and capture efficiency of the coating lines, the last such test was performed in April 2011. This was done after the coating lines were reconfigured to the "3 wet" system, and also corresponded to the production of the new vehicle models at that time, the Focus and the C-Max. The coating line has not changed since these tests were last performed. The facility is considered **compliant** with the requirements of conditions V.2 and 3 at the time of the site visit.

VI. Monitoring/Recordkeeping, IX. Other Requirements

The facility tracks the formaldehyde content of all of the coatings that are used at the facility. A copy of the summary titled "MAP 2017-2018 Color Palette – Formaldehyde Content" was provided to me, and it is attached to this report for reference. (VI.1) The facility and their coating supplier track the formaldehyde content to ensure that it satisfies the requirements and restrictions put forth in IX.1. **Compliance.**

The facility is complying with the reporting requirements in this section, and while the stack dimensions were not verified, it is assumed that the stack parameters that were included in the ROP renewal application, and which appear in the permit, are accurate.

EU-MISCCOAT

This Emission Unit represents miscellaneous coating operations including black out and cavity wax, glass installation and final repair. The spray booth portions of this Emission Unit are equipped with dry filter particulate controls. The equipment and operations in this Emission Unit are also included in the FG-FACILITY and FG-MACT Flexible Groups.

There are no emission or material limits associated with this Emission Unit table.

IV. Design/Equipment Parameters

In accordance with conditions VI.2 and VI.3 in FG-FACILITY, the dry filters are inspected weekly and records are kept of the inspections (IV.1). **Compliance.**

V. Testing/Sampling

At the time of my site visit, the procedure for verifying the properties of the coatings, including the VOC content, were the same as during last site visit, with Axalta as the supplier of the coatings. Recall that for the production of the Ranger and the Bronco, BASF will be the coating supplier. At time of my visit, the facility was tracking the VOC content and physical properties of the coatings used in this emission unit (V.1) via the supplier of the coatings, Axalta, who supplies a Certificate of Analysis to facility environmental staff on a monthly basis. **Compliance.**

The facility is complying with the reporting requirements in this section, and while the stack dimensions were not verified, it is assumed that the stack parameters that were included in the ROP renewal application, and which appear in the permit, are accurate.

EU-PURGE&CLEAN

This Emission Unit represents the system for handling the solvents used for the cleanup and purge of the facility's paint systems. VOC emissions in the controlled portions of the coating lines are sent to the emissions control for that portion of the process. The equipment and operations in this Emission Unit are included in the FG-FACILITY, FG-CONTROLS and FG-MACT Flexible Groups.

There are no emission or material limits associated with this Emission Unit table.

V. Testing/Sampling

Gage Products supplies all of the solvents that are used at the Ford Michigan facility. Gage tracks solvent usage and reclaim/recovery totals, and they provide Ford with the physical properties of the material (V.1) **Compliance.**

The facility is complying with the reporting requirements in this section.

Flexible Group tables

FG-FACILITY

This Flexible Group includes all of the Emission Units and Flexible Groups that are associated with the automotive assembly and coating operations at the Ford Michigan facility, as well as their associated emissions control equipment.

I. Emission Limits

The permit includes facility-wide VOC and PM-10 emission limits that are to be calculated on a 12-month rolling time period basis for the vehicle assembly and coating operations in the Michigan Assembly building. There is a VOC and PM-10 emission limits in tons per year, and a VOC emission limit on a pounds of VOC per job/vehicle basis.

The facility tracks throughput and emissions data in their internal system (PERS). Ford submits quarterly reports to DEQ-AQD that provide monthly emission calculations for VOC and PM-10 for the months in that calendar quarter. The report for the 1st calendar quarter of 2018 was received in the AQD-Detroit Office on April 20, 2018. This report indicates that for February of 2018 (the month for which I received records at the site visit), the 12 month rolling emissions were reported as 225.52 tons of VOC (vs. the permit limit of 903 tpy), 2.18 pounds of VOC per job (vs. the permit limit of 4.8), and 4.33 tons of PM-10 (vs. the permit limit of 32.45 tpy). The facility is **in compliance** with these emission limits. A copy of the summary sheet from the 1st Quarter 2018 reports for February 2018 is attached to this report for reference.

II. Material Limits

The permit includes a natural gas usage limit for vehicle assembly and coating operations in the Michigan Assembly building. The facility also includes natural gas usage information in the quarterly reports that are submitted to DEQ-AQD. The report for the 1st quarter of 2018 shows that the 12-month rolling time period natural gas usage for February 2018 is 427.28 MMCF, well below the permitted limit of 793.18 MMCF. **Compliance.**

III. Process/Operational Restrictions

There are no requirements in this section for FG-FACILITY.

IV. Design/Equipment Parameters

The facility is **in compliance** with condition 1; all of the coating spray booths are equipped with particulate controls.

V. Testing/Sampling

There are no testing requirements associated with FG-FACILITY.

VI. Monitoring/Recordkeeping

The facility is **in compliance** with the monitoring and recordkeeping requirements of this section. The quarterly report that is submitted on behalf of the facility contains all of the information required in condition VI.1a through g. This information originates in the PAI report; a copy of the PAI report for February 2018 is attached to this report for reference.

The facility tracks and keeps records of the weekly inspections of the particulate control systems for the paint booths (SC VI.2). The facility also tracks any changes to the control equipment, and any follow-up testing and monitoring to ensure satisfactory operation of the control equipment (SC. VI.3).

VII. Reporting

The facility submitted all required certification and deviation reports (SCs VII.1 through 3), as well as the quarterly reports that provide monthly VOC and PM-10 emissions (SC VII.4). The facility is also in compliance with the notification requirement in SC. VII.5 relating to any projects that fall under the flexible permit provisions detailed in SCs IX.3 and 4.

VIII. Stack/Vent Restrictions

There are no stack/vent restrictions associated with FG-FACILITY.

IX. Other Requirements

This section contains the Flexible Permit provisions for the assembly and painting operations in SCs IX.1 through 6. These requirements are triggered when the facility makes a change to the assembly and coating

operations.

FG-WAYNEFACILITY

This Flexible Group includes the equipment used for automotive operations at the Wayne Stamping and Assembly portion of the facility; it does not include the equipment in the Powerhouse.

I. Emission Limits, II. Material Limits

The permit includes NO_x and PM-10 emission limits that are to be calculated on a 12-month rolling time period basis, and an annual (on a 12-month rolling time period basis) natural gas usage limit for FG-WAYNEFACILITY. As mentioned throughout this report, the facility tracks throughput and emissions data in their internal system (PERS). Ford submits quarterly reports to DEQ-AQD that provide monthly and 12 month rolling natural gas usage and associated emission calculations for NO_x and PM-10 for the months in that calendar quarter. However, these reports present the natural gas usage associated with FG-FACILITY, which covers the Michigan assembly portion of the facility, and for the powerhouse that is located on the Wayne Assembly portion of the facility.

The supplemental information that the facility includes with their MAERS submittal provides information specific to FG-WAYNEFACILITY. Ford sent me a copy of Calculation Sheet 3b, which provides that 141.97 MMCF of natural gas was used in the FG-WAYNEFACILITY portion of the Michigan Assembly facility 2018, which consists of the Wayne Assembly Plant and the Integrated Stamping and Assembly. The applicable limit in SC II.1 is 720 MMCF per 12-month rolling time period. The reported NO_x emissions for 2018 were 7.1 tons (vs. the permitted limit of 36 tpy), and PM-10 emissions were reported as negligible (vs. the permitted limit of 9 tpy). A copy of Calculation Sheet 3b is attached to this report.

III. Process/Operational Restrictions

There are no requirements in this section for FG-WAYNEFACILITY.

IV. Design/Equipment Parameters

There are no requirements in this section for FG-WAYNEFACILITY.

V. Testing/Sampling

There are no testing requirements associated with FG-WAYNEFACILITY.

VI. Monitoring/Recordkeeping

The facility monitors and records gas usage and emissions, in accordance with SC VI.1. The facility performs weekly visual inspections of any particulate control systems in use as part of this Flexible Group.

VII. Reporting

The facility submitted all required certification and deviation reports (SCs VII.1 through 3).

VIII. Stack/Vent Restrictions

There are no stack/vent restrictions associated with FG-WAYNEFACILITY.

IX. Other Requirements

There are no stack/vent restrictions associated with FG-WAYNEFACILITY.

FG-CONTROLS

This Flexible Group represents the carbon adsorption units and regenerative thermal oxidizers that are used to control the VOC emissions from the paint spray booths and the curing ovens associated with the automotive assembly and paint operations at the Michigan Assembly Plant.

There are no emission limits or material limits associated with this Flexible Group.

III. Process/Operational Restrictions

The facility is **in compliance** with conditions III.1. A copy of the Michigan Assembly Plant Abatement System Operation and Maintenance Control Plan, referred to as the "O & M Plan" in the permit condition, has been submitted to DEQ-AQD. There is a copy of the O & M Plan attached to the report for the site visit that was conducted in 2016.

IV. Design/Equipment

There are no Design/Equipment Parameter requirements for FG-CONTROLS.

V. Testing/Sampling

The facility is **in compliance** with testing requirement in condition V.1. Removal and Destruction Efficiency (RE and DE) tests were performed at Michigan Assembly on March 8-14 and June 22, 2017. The facility is planning to perform RE and DE testing for the new Ranger model's body style in June 2019. This will satisfy the requirements of SCs V.1 and 3.

In accordance with SC V.2, the facility delayed the capture and transfer efficiency (CE and TE) testing due to the upcoming change in models produced at the facility. CE and TE testing was performed for the new Ranger model's body style during the week of March 11, 2019.

VI. Monitoring/Recordkeeping

The permit conditions in this section address the Compliance Assurance Monitoring (CAM) requirements for the control equipment. The facility is **in compliance** with these requirements. The RTOs are equipped with combustion chamber temperature monitoring devices (VI.1), and the carbon concentrators and the fluidized bed carbon concentrator are also equipped with properly installed temperature monitoring devices (SC VI.2). The facility maintains records of maintenance and repair activities in the PERS system in accordance with SC VI.3. The fluidized bed carbon concentrator is equipped with a pressure drop monitoring device (VI.5), and data from this monitoring equipment is kept on file by the facility environmental staff.

The facility works to restore operation of process equipment and control devices during periods of excursion/exceedance as expeditiously as practicable (SC. VI.6). The facility continuously monitors the control equipment when the pollutant-specific emission units are operating, in compliance with SC VI.7.

VII. Reporting

The facility submitted all required certification and deviation reports. **Compliance.**

VIII. Stack/Vent Restrictions

There are no Stack/Vent restrictions for FG-CONTROLS.

IX. Other Requirements

This section contains conditions related to CAM. The facility appears to be **complying** with the provisions of their CAM plan.

FG-MACT

This Flexible Group presents the requirements of 40 CFR Part 63, Subpart IIII (National Emission Standard for Hazardous Air Pollutants – Surface Coating of Automobiles and Light-Duty Trucks) as they apply to the topcoat operations occurring as part of the Michigan Assembly vehicle assembly and painting operations.

I. Emission Limits

This section of the Flexible Group presents the organic HAP emission limits put forth by Subpart IIII. The quarterly submittals that contain monthly emission reports for each calendar quarter also include monthly summaries of emissions relating to FG-MACT. The emissions report for February 2018 contains calculations for each of the emission limits presented by conditions I.1 through I.4 which demonstrates **compliance** with the emission limits. As a side note, the facility can comply with the higher organic HAP pounds per gallon applied coating solids (GACS) limit in 40 CFR 63.3901(b), 1.10 lbs per GACS, as the e-coat materials used in the

coating process do not contain reportable HAPs. Also, the sealers/adhesives used do not contain HAPs, and there is no deadener usage. The February 2018 records show 0.11 lb./GACS, and zero lbs. of organic HAP per lbs. of coating.

II. Material Limits

There are no material limits in this Flexible Group.

III. Process/Operational Restrictions

The conditions in this section encompass the requirements of Subpart IIII to develop and implement work practice standards to minimize emissions of organic HAPs. For condition III.1-3, there are no specific items to check or records to keep. During the site visit, these conditions were discussed with facility staff, and they told me how the facility handles and uses HAP-containing materials, and the steps taken to minimize HAP emissions from these materials.

Regarding the other permit conditions in this section, the facility monitors operating parameters of the emission control equipment (the thermal oxidizers and the carbon concentrators). The facility has implemented and maintains an operation and maintenance plan and a startup, shutdown and malfunction plan for the emissions control equipment. The facility should be **in compliance** with the requirements of this section.

IV. Design/Equipment Parameters

There are no requirements in this section for FG-MACT.

V. Testing/Sampling

As described in the discussion for FG-CONTROLS, the facility has performed capture, destruction and transfer efficiency tests, and the next round of RE and DE testing is scheduled for June 2019 in compliance with permit and regulatory requirements. The facility and their coating-related material suppliers test the materials used at the facility for HAP content in accordance with the requirements of SC. V.3; the HAP content has been determined for all of the coatings used in the Michigan Assembly Plant coating operations. This information is maintained in the facility's PERS recordkeeping system.

VI. Monitoring/Recordkeeping

All of the conditions in this section were not specifically reviewed. Some of them are assumed to be complied with due to the procedures in place and/or records kept by the facility. The facility met the requirements in the Testing/Sampling section, so should be compliant with VI.2. The facility maintains a parametric monitoring system for the emissions control equipment (VI.3), and keeps detailed records of material usage, emissions, and capture/transfer/destruction efficiency tests (VI.4 and VI.5). The operating parameters for the RTOs and carbon concentrators as specified in Subpart IIII are monitored to check compliance in accordance with the methods put forth in Table 1 of Subpart IIII in accordance with SC VI.6.

VII. Reporting

The facility appears to be **complying** with the reporting requirements associated with FG-MACT.

VIII. Stack/Vent Restrictions

There are no stack/vent restrictions associated with FG-MACT.

IX. Other Requirements

Per the requirement of SC IX.1, the facility appears to be in substantial compliance with Subpart IIII.

FG-CIRICEMACT

This Flexible Group addresses five diesel-fired engines at the facility that are subject to the requirements of 40 CFR Part 63, Subpart ZZZZ (National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, or RICE). The five engines, identified as EU-ISAFP#1WEST, EU-ISAFP#2EAST, EU-WAPDIESEL, EU-FIREPUMP#1 and EU-FIREPUMP#2, are classified as engines that are located at a major source of HAP emissions, and that are existing emergency, compression ignition RICE less

than 500 bhp.

The requirements in this Flexible Group were not discussed in great detail during the site visit. There are no emission and material usage limits associated with this Flexible Group. The special conditions include several requirements from Subpart ZZZZ addressing required maintenance activities and operating parameters associated with the engines, and requirements related to the tracking of the hours of operation of the engines. During the site visit, I was provided with a report that tracks the usage of MAP Fire Pump #2. A copy of this report is attached for reference. John also showed me the folders that are kept for the RICE that show all of the maintenance activities that have been performed and that are scheduled for the engines. The facility appears to be in substantial compliance with the requirements of FG-CIRICEMACT.

FG-POWERHOUSE

This Flexible Group includes the three boilers identified as EU-BOILER#1, EU-BOILER#2 and EU-BOILER#3. These three boilers are also included in the FG-BOILERMACT Flexible Group in the renewed ROP, joining the two phosphate line boilers and the filterhouse boiler as units that are now subject to the requirements of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters).

I. Emission Limits, II. Material Limits

This Flexible Group limits the amount of natural and landfill gas that can be combusted in the boilers to 226 MMBTU per hour and 1,898,400 MMBTU per year. The boilers no longer fire landfill gas. The Flexible Group also limits emissions of NOx, CO and SO2 on a pound per MMBTU and pound per hour basis.

The quarterly submittals that Ford Michigan sends to the AQD-Detroit Office include monthly tabulations of the hours of operation of the boilers, the natural gas throughput, and emission estimates for NOx, CO and SO2 in lb./MMBTU*hour and average pounds per hour for each month. This information is prorated to provide an average hourly value for comparison to the limits in the permit. The reported values for February 2018 are well below and **in compliance** with the permitted levels.

III. Process/Operational Restrictions

The facility is in compliance with III.1, as only natural gas is fired in the three boilers.

IV. Design/Equipment Parameters

There are no requirements for this section.

V. Testing/Sampling

There are no testing/sampling requirements currently associated with FG-POWERHOUSE.

VI. Monitoring/Recordkeeping

As referenced in the Emission/Material Limits discussion, the facility keeps the required records **in compliance** with the requirement of condition VI.1.

VII. Reporting

The facility submits all of the required reports.

VIII. Stack/Vent Restrictions

The stack parameters were not verified during this site visit. There has been no indication that these parameters have changed since the emission units were permitted, and it is assumed that the stack information provided in the ROP application, and appearing in the ROP, is accurate.

IX. Other Requirements

The facility is **in compliance** with the conditions in this section. There have not been any odor complaints related to the engines in the powerhouse, so condition IX.1 has not had to be implemented. In addition, Ford has ceased the use of landfill gas at the facility, so the conditions in this section are not currently applicable.

FG-BOILERMACT

This Flexible Group addresses six boilers at the Michigan Assembly facility that are subject to the requirements of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial for Institutional, Commercial, and Industrial Boilers and Process Heaters), also known as the boiler MACT. The six boiler units at the requirements of the boiler MACT are the three boilers in the facility's Powerhouse (EU-BOILER#1, EU-BOILER#2, and EU-BOILER#3), the two boilers associated with the phosphate line (EU-PHOSPHATE), and EU-FHBOILER (the filter house boiler).

There are no emission and material throughput limits associated with this Flexible Group. The Flexible Group contains applicable provisions of the boiler MACT.

During the site visit, we did not discuss the facility's compliance with every permit condition in this Flexible Group. I was shown a folder that is kept by John's group that contains records related to the compliance of the boilers with the provisions of the boiler MACT. Facility staff also address the boiler MACT as part of the annual ROP certification for the facility. In the cover letter that accompanied the annual report for 2017 (received by DEQ-AQD on March 14, 2018), Ford states that:

"...the plant complied with Boiler MACT (40 CFR 60, Subpart DDDDD) as revised by U.S. EPA November 20, 2015. The one-time energy assessment is complete and the work practices (tune-ups) specified in Condition S1 were performed as required...per 40 CFR 63.7495(b). Attached is the notice of compliance that the Ford Wayne Stamping and Assembly & Michigan Assembly plant submitted to U.S. EPA using CEDRI as required by 40 CFR 63.7545(e) and 40 CFR 63.7550(b) as applicable."

Note that the citation of the regulation provided by the facility incorrectly cites Part 60 instead of Part 63. A copy of the notice of compliance that was submitted with the 2017 annual certification report is attached for reference. This notice is part of the CEDRI (Compliance and Emissions Data Reporting Interface) reporting form that the facility sends to EPA to report their annual compliance with the applicable provisions of the boiler MACT. Based on the information presented, as well as the information that is being kept by facility staff relating to the boilers, the facility appears to be in compliance with the requirements associated with FG-BOILERMACT.

FGCOLDCLEANERS

This Flexible Group covers any cold cleaner that is grandfathered or exempt from DEQ-AQD permitting requirements pursuant to Rule 278 and either Rule 281(h) or Rule 285(r)(iv).

Based on the discussions during the site visit, the facility is **complying** with the requirements of the FGCOLDCLEANER table. As discussed during the site visit, records of the location, model, serial number, date of installation/removal, capacity, solvent type used (the facility also tracks the Reid vapor pressure of the materials), air/vapor interface and weekly inspection list for each cold cleaner that is used at the facility are kept in a binder that is monitored by Ford environmental staff. I was told that all of the cold cleaners are affixed with an orange sticker that lists the instructions for proper operating of the equipment.

I was provided with some information relating to the cold cleaners in use at Ford Michigan during the site visit. This information consists of a list of all of the cold cleaners at the facility, and an inspection check list from April 25, 2018. I have attached this information to this report for reference.

FGRULE287(c)

This Flexible Group covers any emission units that are exempt from DEQ-AQD permitting requirements pursuant to Rules 278 and 287(c).

The facility is **complying** with the requirements of the FGRULE287(c) table. The facility environmental staff maintains a binder that contains usage records for all of the materials that are subject to Rule 287(c). The materials currently consist of printing inks that are used in the body shop, a make up ink that is used to clean and coat the printing ink applicator head, and a structural adhesive/sealer that is used in the sub-assembly operation at the former Wayne Assembly building.

FGRULE290

This Flexible Group covers any emission unit that emits air contaminants, and that is exempt from DEQ-AQD permitting requirements pursuant to Rules 278 and 290.

During the site visit, I was told that there are currently no emission units at the Ford Michigan facility that are utilizing the exemption criteria of Administrative Rule 290.

Regulations

40 CFR Part 63, Subpart DDDDD

As mentioned earlier in this report, six boilers at the Ford Michigan facility – Boiler #'s 1-3 in the powerhouse, the two phosphate line boilers, and the filterhouse boilers - are subject to the requirements of 40 CFR Part 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters). The compliance of the subject boilers at the Ford Michigan facility is discussed in the section of this report that addresses the FG-BOILERMACT Flexible Group in the ROP.

40 CFR Part 63, Subpart ZZZZ

There are some emergency fire pump engines at the Ford Michigan facility that are subject to the requirements of 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). These engines are included in MI-ROP-A8650-2016 in the FG-CIRICEMACT Flexible Group. These engines are identified as EU-ISAFP#1WEST, EU-ISAFG#2EAST, EU-WAPDIESEL, EU-FIREPUMP#1 and EU-FIREPUMP#2. All of these engines are identified as being installed prior to June 12, 2006, so they are not subject to the NSPS for diesel-fired engines, 40 CFR Part 60 Subpart IIII.

The facility's compliance status with the requirements of Subpart ZZZZ is discussed in the section of this report that addresses the FG-CIRICEMACT Flexible Group in the ROP.

40 CFR Part 63, Subpart IIII

Certain aspects of the vehicle assembly and painting operations at the Ford Michigan facility are subject to the requirements of 40 CFR Part 63, Subpart IIII (National Emission Standard for Hazardous Air Pollutants – Surface Coating of Automobiles and Light-Duty Trucks). The facility's compliance status with the requirements of Subpart IIII is discussed in the section of this report that addresses the FG-MACT Flexible Group in the ROP.

Compliance Determination

Based upon the results of the May 1, 2018 site visit, and a review of the facility's compliance records, the Ford Motor Company Michigan Assembly Plant appears to be **in compliance** with applicable rules and regulations, including with the terms and conditions of ROP No. MI-ROP-A8650-2016.

Attachments to this report:

- a facility location map;
- sample coating VOC calculation;
- RICE (engine) usage tracking report;
- a listing of cold cleaners, and a copy of a cold cleaner checklist;
- RTO calibration reports for 2017;
- The Boiler MACT annual Notification of Compliance Report for 2017;
- summary sheet of coating formaldehyde content;
- February 2018 monthly summary report from PERS, which includes daily VOC emission summaries, summary reports for each of the different parts of the coating and assembly process (e-coat, guidecoat, topcoat, sealer application, windshield/glass installation, purge and cleanup solvent usage).

NAME

Steve Was

DATE

4/1/19

SUPERVISOR

JK