

Dearborn Truck Plant

Title V Renewable Operating Permit MI-ROP-A8648-2015a

Operating and Maintenance Plan / Malfunction Abatement Plan For Flexible Group - FGCONTROLS

TABLE OF CONTENTS

DESCRIPTION OF CONTROL EQUIPMENT	2
PREVENTATIVE MAINTENANCE PROGRAM	2
CONTROLLED EMISSION SOURCES	3
EMISSION CONTROL EQUIPMENT Filter House – Abatement Filtration Rotary Concentrator – Zeolite Adsorption System (ZAS) Regenerative Thermal Oxidizer (RTO)	.4
Rotary Concentrator – Zeolite Adsorption System (ZAS) Regenerative Thermal Oxidizer (RTO)	.4 .5
CORRECTIVE PROCEDURES	5
COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS	6
OPERATING AND MAINTENANCE PLAN REVIEWS	7
REVISION LOG	.7

DESCRIPTION OF CONTROL EQUIPMENT

A typical paint booth emission control system consists of three steps: filtration, concentration and destruction. Filtration is achieved through the use of dry filters in a Filter House. Concentration of VOCs is accomplished through continuous adsorption and desorption process in a Zeolite Concentrator. The concentrated air stream is then routed to a Regenerative Thermal Oxidizer for destruction. Emissions from paint ovens are routed directly to a Regenerative Thermal Oxidizer for destruction.

PREVENTATIVE MAINTENANCE PROGRAM

Identification of Supervisory Personnel

The Paint Area Manager and Paint Manufacturing Engineering Manager are responsible for overseeing the inspection, maintenance and repair of emission control devices at the Dearborn Truck Plant.

Description of Items and/or Conditions that Shall Be Inspected/Frequency of Inspection or Maintenance

Recommended equipment inspections are performed on a routine basis to ensure the equipment is maintained and operated in a satisfactory manner. Specific inspection and maintenance tasks are incorporated into the facility's electronic Maximo For Maintenance system (MFM) that stores inspection and maintenance task information and automatically generates work orders and tracks completion dates. The table below lists critical preventive maintenance activities performed to assure optimum operating performance of the emission controls systems at the Dearborn Truck Plant. All records of maintenance inspections including the dates, inspection results and reasons for repairs, if made, are located at the Paint Shop and maintained for five years. Preventive maintenance tasks are subject to change based on best engineering judgment and technological/equipment improvements.

		MFM PM		
Control Device	Frequency	Number	Preventative Maintenance MFM Task Title/Description of Maintenance Activity	
Rotary Zeolite	Annually	TPEOS082	Desorption Temperature Calibration	
Concentrator		(Formerly	Validation of thermocouple accuracy or recalibration of each thermocouple a minimur	
		TPEOS113)	of once every 12 months. The thermocouple can be replaced in lieu of validation.	
Rotary Zeolite	Quarterly	34271	Pressure Drop Check	
Concentrator			Observe and record the pressure drop across the concentrator a minimum of once	
			every calendar quarter.	
Rotary Zeolite	Annually	66901	Zeolite Media Observation	
Concentrator			Perform internal observation of adsorbent materials for contamination and erosion a	
			minimum of once every 18 months.1	
Rotary Zeolite	Annually	67030, 67109	Rotary Zeolite Concentrator Seal Check	
Concentrator			Inspect zeolite wheel seal material for cracks, wear, tear etc. at least once every 12	
			months.	
Rotary Zeolite	Semi-	67014, 67101,	Concentrator Proximity Switch Solenoid Valve Check	
Concentrator	Annually	67102	Inspect proximity switches including flags, screws, cables, etc. at least once every 6	
			months.	
Rotary Zeolite	Quarterly	37674, 37675	Blower and Fan Belt Inspection	
Concentrator			Inspect solvent laden air and desorption blower and belt condition.	
Rotary Zeolite	Quarterly	66856	E-Coat/ Enamel Booths Exhaust Proximity Switch Solenoid Valve Check	
Concentrator,			Inspect proximity switches including flags, screws, cables, etc. at least once per	
Regenerative			quarter.	
Thermal Oxidizer				
Rotary Zeolite	Semi-	36960, 36962,	Abatement System IR Survey	
Concentrator, Prime	Annually	36963, 66852	Conduct a thermal scan inspecting power cables from VFD to motor and from the	
Solvent Laden Air			substation to the VFD at least semi-annually.	
(SLA) Blower				

Rotary Zeolite Concentrator, Prime Solvent Laden Air (SLA) Blower, Regenerative Thermal Oxidizer	Annually	39289	<u>Clean VFDs</u> Thoroughly clean the interior of the air supply fan VFDs including filter changes, removal of debris, etc. at least once every 12 months.
Rotary Zeolite Concentrator, Regenerative Thermal Oxidizer	Quarterly	36277	<u>Alarm Testing/Verification</u> Verify visual alerts, audible alarms, and electronic notification systems for abatement equipment downtime and bypasses are functional.
Prime Solvent Laden Air (SLA) Blower	Quarterly	67861	Blower and Fan Belt Inspection Inspect solvent laden air and desorption blower and belt condition.
Regenerative Thermal Oxidizer	Semi- Annually	67050, 67175, 67176, 67177, 67178	RTO IR Survey Conduct a thermal scan inspecting power cables from VFD to motor and from the substation to the VFD at least semi-annually. Scan entire RTO vessel for hot spots.
Regenerative Thermal Oxidizer	Quarterly	34916, 36964, 67720	Oxidizer Proximity Switch Solenoid Valve Check Inspect proximity switches including flags, screws, cables, etc. at least once per guarter.
Regenerative Thermal Oxidizer	Annually	TPEOS082 (Formerly TPEOS113)	Combustion Chamber Temperature Calibration Validation of thermocouple accuracy or recalibration of each thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.
Regenerative Thermal Oxidizer	Annually	67035	Cold Face Check / Heat Exchange-Heat Transfer Media Inspection Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months. ¹
Regenerative Thermal Oxidizer	Semi- Annually/ Annual	67710, 67048	Inlet/Outlet Valve Check /Valve Seals Condition Inspection Perform an inspection of the valve seals condition a minimum of once every 18 months. ¹
Regenerative Thermal Oxidizer	Weekly	37806	Booth and Oven Balance Inspection Observe and record airflows for all of production paint booths and ovens.

¹ The requirement to address this issue is satisfied if a performance test (i.e., stack test) has been performed on the control device within the prior 18 month period.

Identification of Major Replacement Parts to be Maintained in Inventory for Quick Replacement

The emission control devices are equipped with Programmable Logic Controllers to identify conditions that may contribute to malfunctions by generating warning faults and alarms. Typically, only small minor repairs are required (i.e. replacement of proximity switches). However, a list of recommended major replacement parts has been incorporated in the plant's MFM system and part availability is routinely verified (i.e., quarterly). Attached is a list of the spare parts maintained at the Dearborn Truck Plant (See **Attachment 1** - DTP Spare Parts List).

Addressing Concerns Identified During Preventative Maintenance Completion

When concerns are identified during preventative maintenance activities, assessment, and/or general observations, they are addressed as soon as practicable. When defects are identified (e.g. warped thermocouples), the equipment performance is then evaluated (via testing, calibrating, etc.). If replacement is deemed necessary, it is completed immediately.

CONTROLLED EMISSION SOURCES

Two rotary zeolite adsorption units followed by a regenerative thermal oxidizer for control of VOC emissions from the EU-ECOAT dip tank and EU-TOPCOAT clearcoat automatic sections and a regenerative thermal oxidizer for control of VOC emissions from the EU-ECOAT curing oven, EU-GUIDECOAT oven, and EU-TOPCOAT ovens.

Emission Units: All emission units and flexible groups associated with automotive painting.

EMISSION CONTROL EQUIPMENT

Filter House – Abatement Filtration

As the solvent laden air passes through four different stages of filtration, smaller and smaller particulate sizes are removed before being directed to the Rotary Zeolite Concentrator. Differential pressure gauges are located between filtration stages and are monitored to determine the frequency of filter changes. Recommended ranges for differential pressures stages are <1.0 inches water column for Stage 1, <1.25 inches water column for Stage 2, <1.25 inches water column for Stage 3 and <1.5 inches water column for Stage 4. Depending on the type and age of the equipment, the Programmable Logic Controller (PLC) is programmed to sound an alarm if the differential pressure is outside the required operating range. The facility also inspects and trends the differential pressures on a routine basis to schedule the next required filter change.



Rotary Zeolite Concentrator - Zeolite Adsorption System (ZAS)

Concentration of VOCs is accomplished through a continuous adsorption and desorption process. Exhaust air from the Filterhouse is routed to the rotor concentrator. The rotor concentrator is sub-divided into two sections: a large adsorption zone and a small desorption zone. Adsorption is the process by which the VOC molecules present in the exhaust air are collected and retained on the surface of adsorbent media. As the rotary concentrator rotates, VOCs is adsorbed onto the surface of zeolite blocks. Adsorbed VOC is then removed in the desorption zone by hot air. During the desorption cycle, the heat releases the previously absorbed VOC molecules into the isolated desorption air stream and is then routed to an oxidizer for destruction. The desorption air temperature (approximately 375 degrees F typically) is monitored through the Programmable Logic Controller. Currently the Programmable Logic Controller (PLC) is programmed to light beacons and sound an alarm if the desorption temperature is outside the required operating range.

In order to maintain the system, the zeolite concentrator seals are inspected annually for cracks, wear and tear. The facility has determined that improperly sized seals may cause premature wearing; therefore, a standard for seal dimensions (including holes) has been established and will be adhered to during replacement activities. In addition, when cracked, worn or torn seals are identified, they will be replaced with new seals as soon as practicable.





Regenerative Thermal Oxidizer (RTO)

The Regenerative Thermal Oxidizer consists of multiple towers installed in a line, each containing a packed bed of inert ceramic based media. Ford RTOs typically consist of three towers that continuously alternate from inlet, outlet and purge stages. Incoming concentrated solvent-laden exhaust from the Rotary Zeolite Adsorption System flows into the bottom of the first tower and up through the hot ceramic saddles or ceramic block. Air is preheated to within 60-100°F of the combustion temperature of approximately 1400 degrees F. The clean hot exhaust gas then flows down through the second ceramic filled tower and transmits most of its thermal energy to the ceramic media before being discharged. After 1-2 minutes the dampers change positions and the air flow is reversed. Solvent laden air flows through the second tower that was preheated. The combustion chamber temperature is monitored through the Programmable Logic Controller. The Programmable Logic Controller.





CORRECTIVE PROCEDURES

Description of the Corrective Procedures Taken in the Event of a Malfunction or Failure When an abatement equipment fault condition/fault status occurs, plant personnel respond immediately and make every effort to address the issue until the fault is resolved. All actions will be documented in the plant malfunction abatement report/4D.

When a fault condition lasts for more than 15 minutes, the condition is elevated to the Plant Environmental Control Engineer (PECE), Plant Engineering Manager, Paint ME Manager and Paint Maintenance Supervisor to ensure all required resources are available (if necessary) and alternative solutions have been evaluated to resolve the issue. The notification includes the piece of abatement equipment the fault occurred on, the time the fault occurred and the estimated time for repairs.

For all events which exceed 2 hours in duration, further action is taken (i.e. contacting a third party if necessary, contacting Global Paint Engineering, etc.) and a follow-up notification will be sent stating the current status of the incident and information on the cause of the fault. The notification will be sent to the PECE, Paint ME Manager, Plant Engineering Manager, Paint Area Manager, Assistant Plant Manager and Plant Manager.

To minimize emissions impact to the environment caused by abatement equipment malfunctions, the facility will:

- 1. Utilize redundant equipment and readily available spare parts where possible to reduce the amount of downtime.
- Identify root cause, interim and permanent corrective actions and evaluate permanent corrective actions to prevent reoccurrence and minimize emissions. The malfunction abatement plan or critical spare parts list will be updated as required to ensure implementation of all identified corrective actions.
- 3. In the event that the abatement equipment will be in an off-line condition for an extended time period, the plant will evaluate all options for reducing excess emissions, including production curtailment, elimination of planned/scheduled overtime production as well as sequenced shutdown of the emission source until the abatement equipment can be returned to normal operation.

Once the abatement equipment is back on-line, an Air Emission Control Equipment Breakdown Report /4D is completed with details on the piece of abatement equipment the fault occurred on, the duration of the breakdown (i.e., date, times, shift type), interim corrective actions, root cause of the fault, names and times that any service representatives were contacted and permanent corrective actions. The completed report is submitted to the PECE. The information is also routed to the Environmental Quality Office and Global Paint Engineering office for review and analysis. The information on the Air Emission Control Equipment Breakdown Report/4D will be used to adjust emission calculations to account for the breakdown.

In addition, the PECE will notify the EGLE Air Quality Division, during extended breakdown or bypass events (e.g. events greater than 2 hours). The notification will be made as soon as reasonably possible, but not later than 4 hours after becoming aware of the event, Monday – Friday, 6:00 am to 4:00 pm, or the following business day after 4pm and on weekends. A written report that identifies the emission source and addresses all of the elements listed below will be submitted to the EGLE within 10 days of the malfunction event.

- (a) The periods of excess emissions that occurred during start-up or shutdown were short and infrequent and could not have been prevented through careful planning and design.
- (b) The excess emissions that occurred during start-up or shutdown were not part of a recurring pattern indicative of inadequate design, operation, or maintenance.
- (c) The excess emissions caused by a bypass (an intentional diversion of control equipment) were unavoidable to prevent loss of life, personal injury, or severe property damage.
- (d) The facility was operated at all times in a manner consistent with good practice for minimizing emissions.
- (e) The frequency and duration of operating in start-up or shutdown mode were minimized to the maximum extent practicable.
- (f) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality.
- (g) All emission monitoring systems were kept in operation if at all possible.
- (h) The actions during the period of excess emissions were documented by contemporaneous operating logs or other relevant evidence as provided by R 336.1912.
- (i) Excess emissions presenting an imminent threat to human health, safety, or the environment were reported to the department as soon as possible.
- (j) Unless otherwise specified in the facility's permit, other excess emissions were reported as provided in R 336.1912. If requested by the department, a person shall submit a full written report that includes the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.
- (k) Any information submitted to the department under this sub rule shall be properly certified in accordance with the provisions of R 336.1912.

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

The requirements of Compliance Assurance Monitoring (CAM), as promulgated under 40 CFR 64.2, apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

(1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under 40 CFR 64.2(b)(1) of this section;

(2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

(3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, ``potential pre-control device emissions" shall have the same meaning as ``potential to emit," as defined in Sec. 64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

In accordance with 40 CFR 64.3, to provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit, monitoring under this part, the CAM Plan shall meet the following general criteria:

(1) The owner or operator shall design the monitoring to obtain data for one or more indicators of emission control performance for the control device and any associated capture system. Indicators of performance may include, but are not limited to, direct or predicted emissions, process and control device parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities conducted by the owner or operator.

(2) The owner or operator shall establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions. In addition, unless specifically stated otherwise by an applicable requirement, the owner or operator shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere, if such bypass can occur based on the design of the pollutant-specific emissions unit.

(3) The design of indicator ranges or designated conditions may be based on a single maximum or minimum value if appropriate, may be expressed as a function of process variables, may be expressed as maintaining the applicable parameter in a particular operational status or designated condition, or may be established as interdependent between more than one indicator.

Under 40 CFR 64.4(4)(b), for a CAM Plan, the owner or operator shall submit a justification for the proposed elements of the monitoring plan and if the proposed performance specifications include differences from manufacturer recommendations, the plan shall explain the reasons for the differences.

At the Dearborn Truck Plant, the following sources are subject to CAM under the above requirements:

- EU-ECOAT (utilizing rotary zeolite concentrator and regenerative thermal oxidizer for compliance)
- EU-GUIDECOAT (utilizing rotary zeolite concentrator and thermal oxidizer for compliance)
- EU-TOPCOAT (utilizing rotary zeolite concentrator and regenerative thermal oxidizer for compliance)

Rotary Zeolite Concentrators

Desorption Temperature and Calibration: Monitor desorption gas inlet temperature to ensure it is not more than 15 degrees Fahrenheit below the temperature recorded during the most recent performance test (349°F) and calibrate or replace the thermocouple a minimum of once every 12 months to ensure desorption is maintained at a temperature necessary to concentrate volatile organic compounds from the incoming air stream for delivery to the regenerative thermal oxidizer.

Pressure Drop Check: Observe and record the pressure drop across the concentrator a minimum of once every calendar quarter to ensure that solvent-laden air may pass into the concentrator media as designed.

Zeolite Media Observation: Perform an internal observation of adsorbent materials for contamination and erosion a minimum of once every 18 months to ensure that solvent-laden air may pass into the concentrator media as designed (unless tested within the prior 18 months).

Regenerative Thermal Oxidizers

Combustion Chamber Temperature and Calibration: Monitor combustion chamber temperature to ensure it is not more than 50 degrees Fahrenheit below the most recent performance test (1352°F) and calibrate or replace the thermocouple a minimum of once every 12 months to ensure air stream is maintained at a temperature necessary to destroy the volatile organic compound within the regenerative thermal oxidizer.

Cold Face Check / Heat Exchange-Heat Transfer Media Inspection: Perform a heat exchange/heat transfer media a minimum of once every 18 months to ensure that solvent-concentrated air may pass into the oxidizer as designed (unless tested within the prior 18 months).

Inlet/Outlet Valve Check /Valve Seals Condition Inspection: Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months to ensure that the proper retention time for destruction of volatile organic compounds within the oxidizer is maintained (unless tested within the prior 18 months).

Monitoring of these key operational parameters described in this section meet the requirements of CAM as defined in 40 CFR Part 64 for each of the affected emission units.

OPERATING AND MAINTENANCE PLAN REVIEWS

This Operating and Maintenance/Malfunction Abatement Plan will be reviewed and updated as required to ensure the equipment is maintained and operated in a satisfactory manner and consistent with good air pollution control practices for minimizing emissions. Preventive maintenance tasks and actions taken to respond to malfunctions/faults will be reviewed and revised (if necessary) based on best engineering judgment and technological/equipment improvements.

Reviews of this Operating and Maintenance/Malfunction Abatement Plan will be periodically conducted by the PECE and the Paint ME Manager or his designee. Reviews will be completed at least annually or following evaluation of an abatement equipment malfunction (in which it has been determined that a revision is necessary).

Records of the Operating and Maintenance/Malfunction Abatement Plan review will be maintained by the PECE for a period of 5 years.

REVISION LOG

Date	Page	Revision	Comments
05/15/17	1	Updated title to include "Malfunction Abatement Plan" and revised date to "May 2017"	
05/15/17	2	Edits made to Preventative Maintenance section text	

05/15/17	2	Added "Rotary Zeolite Concentrator Seal Check" PM to the Preventative Maintenance Program section.	This PM addresses concerns related to equipment (e.g. carbon concentrator seals) referenced in an October 14, 2016 Violation Notice	
05/15/17	2	Added "Concentrator Proximity Switch Solenoid Valve Check" PM to the Preventative Maintenance Program section.	This PM addresses concerns associated with proximity switches documented within the DTP ROP 2016 Semi- Annual/Annual Deviation Report.	
05/15/17	2	Added "Abatement System IR Survey" PM to the Preventative Maintenance Program section.	This PM addresses concerns related to equipment (e.g. VFDs) referenced in an October 14, 2016 Violation Notice	
05/15/17	2	Added "Clean VFD" PM to the Preventative Maintenance Program section.	This PM addresses concerns related to equipment (e.g. VFDs) referenced in an October 14, 2016 Violation Notice	
05/15/17	3	Added "RTO IR Survey" PM to the Preventative Maintenance Program section.	This PM addresses concerns related to equipment (e.g. VFDs) referenced in an October 14, 2016 Violation Notice	
05/15/17	3	Added "Oxidizer Proximity Switch Solenoid Valve Check" PM to the Preventative Maintenance Program section.	This PM addresses concerns associated with proximity switches documented within the DTP ROP 2016 Semi- Annual/Annual Deviation Report.	
05/15/17	3	Added "Inspection and Re-Building of Valves and Actuators" PM to the Preventative Maintenance Program section.	This PM addresses concerns related to equipment (e.g. Nitrogen Generator) referenced in an October 14, 2016 Violation Notice	
05/15/17	3	Removed the "Typical Emission Control Equipment Replacement Parts Inventory Table" and added an Attachment 1 – DTP Spare Parts List.	The list was expanded to document how the facility reduces downtime associated with malfunction events; thereby reducing emissions impact.	
05/15/17	3	Revised the "Fluidized Bed Carbon Bead Replacement/Regeneration" language.	The revised language includes actions taken to mitigate malfunctions associated with carbon flow. These actions address concerns referenced in an October 14, 2016 Violation Notice.	
05/15/17	4-5	Revised "Fluidized Bed Concentrator" section. Added text related to the Nitrogen Generator.	The revised language addresses corrective/preventative actions taken to mitigate downtime related to the fluidized bed SLA Fan VFD as well as the nitrogen generator	
05/15/17	5-6	Revised the Corrective Procedures section	Added language documenting the actions the plant will take to minimize emissions impact during malfunctions.	
05/15/17	7-8	Updated "Operating and Maintenance Plan Reviews" section	Revised text to specify the frequency of review for this plan	
05/15/17	8	Added a Revision Log		
07/14/17	3	Added " Addressing Concerns Identified During Preventative Maintenance Completion" section	Added this language to document how concerns identified within PMs, third party assessments and/or general observations are addressed (e.g. warped thermocouples, seals, etc.)	
07/14/17	3	Revised the "Fluidized Bed Beaded Activated Carbon (BAC) Replacement/Reactivation" section	Revised language to reflect new change-out process for BAC	
07/14/17	4	Revised "Rotary Zeolite Concentrator-Zeolite Adsorption System (ZAS) section	Revised language to include actions taken to address worn, torn or cracked seals	
07/14/17	4	Revised "Fluidized Bed Concentrator" section	Removed reference to Wet Electrostatic Precipitator	
07/14/17	5	Revised "Regenerative Thermal Oxidizer (RTO)" section	Removed reference to Regenerative Catalytic Oxidizer and added note documenting the installation of the redundant SLA fan VFD	
07/14/17	6	Revised "Corrective Procedures" section	Revised language to document how immediate action is taken to address all fault conditions	
07/24/17	2	Updated frequency of Rotary Zeolite Concentrator PMs 67014, 67101, 67102 from every 3 months to every 6 months to match recommended frequency	Corrected administrative error in Manual.	

07/24/17	2	E-Coat/ Enamel Booths Exhaust Proximity Switch Solenoid Valve Check PM 66856	Historical PM facility has been completing. Omitted from Manual as an oversight.
08/17/17	7	Revised "Corrective Procedures" section	Revised language to clarify actions taken to minimize emissions during abatement malfunctions and to document notification to the AQD during extended downtime
08/17/17	8	Revised "Compliance Assurance Monitoring (CAM) Requirements" section	Removed "presumptively acceptable" references
04/24/18	2	Deleted duplicate PM	Concentrator Proximity Switch Solenoid Valve Check was duplicated in the PM table. Deleted the quarterly PM
04/24/18	6	Revised the "Corrective Procedures" section	Revised language to clarify that notification will be made to the MDEQ during extended breakdown events, which also includes bypass events greater than 2 hours.
04/24/18	1	Revised cover page	Deleted "Modified August 2017" from cover page
09/14/18	2-3	Added "Blower and Fan Belt Inspection", " <u>Alarm</u> <u>Testing/Verification</u> " and "Booth and Oven Balance Inspection" PMs to the Preventative Maintenance Program section.	PMs added as preventive actions to address abatement equipment malfunction incidents.
4/17/19	2-3	Changed Prime Fluidized Bed Concentrator PM number from 34626 to 67861.	PM number updated to reflect removal of redundant PM in MFM.
02/07/2020	All	Removed references to Prime Fluidized Bed Concentrator. Updated with latest performance testing temperatures.	

Ford Motor Company Rouge Center

Fugitive Dust Control Plan

November 3, 2009