

Michigan Department of Environmental Quality
Air Quality Division

State Registration Number
B2767

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B2767-2016

FCA US LLC, Warren Truck Assembly

SRN: B2767

Located at

21500 Mound Road, Warren, Michigan 48091-4840

Permit Number: MI-ROP-B2767-2016

Staff Report Date: May 31, 2016

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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RENEWABLE OPERATING PERMIT

May 31, 2016 - STAFF REPORT

ROP Number

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Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for Air Pollution Control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	FCA US LLC, Warren Truck Assembly 21500 Mound Road Mail code: CIMS 447-00-00 Warren, Michigan 48091-4840
Source Registration Number (SRN):	B2767
North American Industry Classification System (NAICS) Code:	336112
Number of Stationary Source Sections:	One (1)
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201500086
Responsible Official:	Mr. Andrew Ragalyi, Plant Manager 586-497-3955 or Andrew.Ragalyi@fcagroup.com Mail code: CIMS 447-00-00
AQD Contact:	Iranna Konanahalli, Senior Environmental Engineer 586-753-3741 or konanahallii@michigan.gov
Date Application Received:	June 08, 2015
Date Application Was Administratively Complete:	June 29, 2015
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	May 30, 2016
Deadline for Public Comment:	June 29, 2016

Source Description

FCA US LLC Warren Truck Assembly Plant (FCA WTAP) is located at the northeast corner of 8 Mile Road and Mound Road in the city of Warren, Macomb County, Michigan. The plant is located in an industrial area with FCA Stamping and GM powertrain plants towards north on Mound Road (between 8 Mile and 10 Mile Roads). The plant receives stamped parts from FCA Stamping via tunnel. The plant manufactures or assembles light-duty trucks. Prior to coating, the truck bodies are cleaned and pretreated to prepare vehicle bodies for painting: body cleaning and phosphate treatment. The principal emissions are volatile organic compounds (VOC), including hazardous air pollutants (HAP), from coating operations: primer (dip e-coat), primer surfacer (powder coating with practically nil emissions), topcoat, reprocess, final repair, sealers and adhesives, miscellaneous solvents, etc. About 1984, the truck plant obtained construction (Permit-to-Install) permits pursuant to Rule 336.1220 for VOC Major Offset Sources in ozone non-attainment area. The permits required installation and operation of Lowest Achievable Emission Rate (LAER) technology for coating operations that emit VOC. The coating bake oven VOC emissions are controlled by five thermal oxidizers (one RTO for a dip e-coat bake oven and four thermal oxidizers for topcoat bake ovens). Paint overspray particulate emissions are controlled by downdraft water wash systems from topcoat booths and dry filter system from other operations such as final repair, repair deck, etc. The VOC emissions from topcoat coating booths are released to ambient air, via stacks on the roof, without destruction or removal using VOC control systems. The natural gas fired boilers (two portable temporary and four permanent) that principally emit nitrogen oxides (NOx) provide steam for space heating and process needs.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2015**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	140
Lead (Pb)	0.0005 (0.95 lbs./yr.)
Nitrogen Oxides (NO _x)	100
Particulate Matter (PM10) - Filterable	1.2
Sulfur Dioxide (SO ₂)	0.6
Volatile Organic Compounds (VOCs)	1,844

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2015 by MAERS-2015:

Individual Hazardous Air Pollutants (HAPs) **	Pounds per Year
Benzene	177
Formaldehyde	18
Total Hazardous Air Pollutants (HAPs)	195 Pounds per Year

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

See Parts C and D in the ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Macomb County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

ROP: The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because:

1. The potential to emit of volatile organic compounds (VOC) exceeds 100 tons per year; i.e., a major source for criteria pollutant and
2. The potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year; i.e., major source for hazardous air pollutants (NESHAP/MACT).

NSPS:

1. Immersion cathodic e-coat primer (EU-UNIPRIME) and topcoat (EU-TUTONE, EU-COLOR-ONE, EU-COLOR-TWO and EU-REPROCESS) operations at the stationary source are subject to the Standards of Performance for Automobile Light-Duty Truck Surface Coating Operations promulgated in 40 CFR Part 60, Subparts A and MM.
2. Two portable temporary natural gas fired boilers (EU-TEMPBOILER1 and EU-TEMPBOILER2) and three of four permanent (installed after June 9, 1989) natural gas fired boilers (EU-BOILER3, EU-BOILER4 and EU-BOILER5) at the stationary source are subject to the Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units promulgated in 40 CFR Part 60, Subparts A and Dc. One of four natural gas fired boilers (EU-BOILER6) is not subject to this NSPS Dc standard as it was installed before June 10, 1989 (October 29, 1984).
3. One Fire Pump Emergency Engine (EU-ENG-FPH2) at the stationary source is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII (4I). (FG-CI-RICE-NSPS4I<500)

NESHAP/MACT:

1. EU-UNIPRIME, EU-SOLVENT-WIPE, EU-SEALERS and ADHESIVE, EU-BLACKOUT-BOOTH, EU-TUTONE, EU-COLOR-ONE, EU-COLOR-TWO EU-REPROCESS (High-bake), EU-FINAL-REPAIR (Low-bake spovens), EU-SPOT-REPAIR-DECK (1-12 stations) at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Surface Coating of Automobiles and Light-Duty Trucks promulgated in 40 CFR Part 63, Subparts A and IIII (4I) (FG-AUTOMACT).
2. Methanol storage tanks at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Organic Liquids (non-gasoline) Distribution (OLD) promulgated in 40 CFR Part 63, Subparts A and EEEE (4E) (FG-OLDMACT).
3. Two portable temporary natural gas fired boilers (EU-TEMPBOILER1 and EU-TEMPBOILER2) and four permanent natural gas fired boilers (EU-BOILER3, EU-BOILER4, EU-BOILER5 and EU-BOILER6) at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Major Sources Industrial, Commercial, and Institutional Boilers and Process Heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD (5D) (FG-BOILER-MACT5D).
4. Existing CI RICE Engines (EU-ENG-FPH1<500HP, EU-ENG-SMB1>500HP and EU-ENG-SMB2>500HP) at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines; New Source Performance Standards for Stationary Internal Combustion Engines (ICE) promulgated in 40 CFR Part 63, Subparts A and ZZZZ (4Z) (FG-CI-RICE-MACT4Z<500HP and FG-CI-RICE-MACT4Z>500HP).

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

CAM: Both dip e-coat primer (known as Uniprime EU-UNIPRIME) and topcoat (EU-COLOR-ONE EU-COLOR-TWO, EU-REPROCESS) in addition to EU-TUTONE operations at the stationary source are subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 CFR Part 64. These emission units have a control device and potential pre-control emissions of Volatile Organic Compounds (VOC) greater than the major source threshold level. NESHAP/MACT 4I (40 CFR Part 63 Subpart IIII) is a post-11/15/1990 presumptively acceptable CAM. However, the permittee opts to show compliance with the Auto MACT HAP emission limits without taking HAP destruction credit pertaining to the oven thermal oxidizers via use of compliant coatings. Hence, custom CAM is a part of ROP. CAM monitoring conditions are found in EU-UNIPRIME, EU-TUTONE, and FG-TOPCOAT.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-B2767-2011 are identified in Appendix 6 of the ROP.

PTI Number			
480-84	485-84	467-84b	468-84a
470-84a	471-84a	214-96	489-84
473-84	474-84	497-84	499-84
498-84	339-99	483-84	484-84
757-87a	488-84	496-84	464-84a
465-84	495-84	461-84	462-84
188-01			

Streamlined/Subsumed Requirements

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

Non-applicable Requirements

Part E of the ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the ROP Application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

Exempt Emission Unit ID	Description of Exempt Emission Unit	Rule 212(4) Exemption	Rule 201 Exemption
EU-ENG-FPH1	Existing, emergency, 266 HP, diesel fueled, reciprocating internal combustion engine.	R 285(g)	R 212(4)(d)
EU-ENG-FPH2	New, emergency, 305 HP, diesel fueled, reciprocating internal combustion engine.	R 285(g)	R 212(4)(d)
EU-ENG-SMB1	Existing, emergency, 900 HP, diesel fueled, reciprocating internal combustion engine.	R 285(g)	R 212(4)(d)
EU-ENG-SMB2	Existing, emergency, 900 HP, diesel fueled, reciprocating internal combustion engine.	R 285(g)	R 212(4)(d)
All CI RICE engines are included in ROP as NESHAP / RICE MACT 4Z or NSPS 4I			

Draft ROP Terms/Conditions Not Agreed to by Applicant

This draft ROP does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action taken by the MDEQ, AQD

The AQD proposes to approve this ROP. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft ROP and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Joyce Zhu, Southeast Michigan Acting District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP Application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

Michigan Department of Environmental Quality
Air Quality Division

State Registration Number

RENEWABLE OPERATING PERMIT

ROP Number

B2767

September 30, 2016 - STAFF REPORT ADDENDUM

MI-ROP-B2767-2016

Purpose

A Staff Report dated May 31, 2016, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Mr. Dan Omaha, Plant Manager 586-497-3955 or dan.omahen@fcagroup.com Mail code: CIMS 447-00-00
AQD Contact:	Iranna Konanahalli, Senior Environmental Engineer 586-753-3741 or konanahalli@michigan.gov

Summary of Pertinent Comments and Changes to the May 31, 2016 (30-day PN May 31 through June 29, 2016), Draft ROP

AQD received comments during the 30-day public comment period from FCA US, LLC and US EPA.

FCA US, LLC

FCA commented (June 29, 2016) that EU-UNLEADEDGAS2 and EU-UNLEADEDGAS3 must be removed from the ROP as each tank (1,000-gallon capacity each < 2,000-gallon capacity) is not subject to Rule 336.1703.

Changes due to FCA US, LLC comments (June 29, 2016)

AQD accepts this comment and the 1,000-gallon tanks (2) have removed from the ROP (FG-GASOLINE-TANKS).

US EPA Comments

Chris Ethridge
Southeast Michigan District Supervisor
Southeast Michigan District Office
Michigan Department of Environmental Quality
27700 Donald Court
Warren, Michigan 48092

Dear Mr. Ethridge:

The U.S. Environmental Protection Agency has reviewed the draft Renewable Operating Permit (ROP), permit number MI-ROP-B2767-2016, for FCA US LLC, Warren Truck Assembly located in Warren,

Michigan. To ensure that the source meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

1. EU-UNIPRIME and EU-TUTONE. The staff report and the draft permit indicate that EU-UNIPRIME and EU-TUTONE are subject to compliance assurance monitoring (CAM). Each of these emission units has a control device and the pre-control emissions of volatile organic compounds (VOC) is greater than the major source threshold level. The draft permit indicates the sole CAM requirement is implementation of an operation and maintenance plan. The draft permit should include all requirements specified in 40 CFR § 64.6(c) for each CAM subject pollutant specific emission unit. Please review the draft permit and revise, as necessary. In addition, please verify whether there are any specific provisions contained in the operation and maintenance plan that are necessary to assure compliance and include in the permit as appropriate.
2. Various Emission Units, SC. I. Emission Limit(s). The emission limit table for several emission units (EU-MECH-WASHER, EU-UNIPRIME, EU-SOLVENT-WIPE, EU-SEALERS and ADHESIVE, EU-BLACKOUT-BOOTH, EU-TUTONE, EU-FLUID-FILL, EU-FINAL-REPAIR, and FG-TOPCOAT) include references to General Condition 13 for monitoring and testing methods. The monitoring/testing method column should reference the specific Special Conditions identified in subsections II through VI as they relate to each emission limit. Please revise the draft permit to include specific monitoring requirements sufficient to assure compliance with these permit terms and conditions, in accordance with 40 CFR § 70.6(c)(1).
3. EU-BLACKOUT-BOOTH, SC. VI.2. Monitoring/Recordkeeping. The monitoring/recordkeeping for EU-BLACKOUT-BOOTH indicates that the permittee is required to keep records of visual inspections of each exhaust filter which include the dates and results of the inspections and the dates and reason for repairs. The draft permit does not contain any information concerning the frequency or procedure for conducting visual inspections for the exhaust filters. Please provide further information concerning the frequency of inspections, any procedures to be followed during inspections, and/or information on any plans that reference the information and revise the permit as necessary to assure compliance with 40 CFR § 70.6(c)(1).
4. EU-TUTONE, SC. VI. Monitoring/Recordkeeping. The emission unit has a thermal oxidizer as one of the pollution control devices on the unit. There are certain conditions specific to the placement, installation, calibration, and maintenance of the thermal oxidizer contained in the special conditions for EU-TUTONE, but there is no information concerning the minimum operating temperature of the thermal oxidizer. For example, FG-TOPCOAT SC.III.1 contains information specific to the proper operation of the thermal oxidizer associated with that unit. Please review the applicable requirements and associated monitoring for the EU-TUTONE thermal oxidizer and update the permit accordingly.
5. EU-FINAL-REPAIR, SC. VI. Monitoring/Recordkeeping. The monitoring/recordkeeping for EU-FINAL-REPAIR indicates that the permittee is required to keep records of visual inspections of each exhaust filter which include the dates and results of the inspections and the dates and reason for repairs. The draft permit does not contain any information concerning the frequency or procedure for conducting visual inspections for the exhaust filters. Please provide further information concerning the frequency of inspections, any procedures to be followed during inspections, and/or information on any plans that reference the information and update the permit as necessary, in order to assure that the permit includes sufficient monitoring in accordance with 70.6(c)(1).
6. FG-RULE-331, SC.I. Emission Limits. The draft permit contains particulate matter (PM) emission limits for FG-RULE-331. The conditions associated with the flexible group do not contain any associated monitoring to demonstrate compliance with the emission limits, as required by 40 CFR §70.6(a)(3) and 70.6(c)(1). Please review the conditions for FG-RULE-331, provide further

information on how the permittee demonstrates compliance with the emission limit, and revise the permit as necessary.

7. FG-PM-MISC, SC. I. Emission Limits. The draft permit contains PM emission limits for FG-PM-MISC. The conditions associated with the flexible group do not contain any associated monitoring to demonstrate compliance with the emission limits. Please review the conditions for FG-PM-MISC and provide further information on how the permittee demonstrates compliance with the emission limit and to assure compliance with these permit terms and conditions, in accordance with 40 CFR §70.6(c)(1), and revise the permit as necessary.

We appreciate the opportunity to provide comments on this permit. If you have any questions, please feel free to contact Sarah Rolfes, of my staff, at (312) 886-6551.

Sincerely,

Genevieve Damico
Chief
Air Permits Section

AQD reviewed these comments and made changes/additions (*italicized*) to the ROP based upon the discussions with US EPA (Rolfes, Sarah [E-mail: Rolfes.Sarah@epa.gov])

Note: All changes/additions are *italicized* where appropriate.

Changes due to US EPA comments (June 29, 2016)

The following changes are made to the May 31, 2016 draft ROP.

Non-CAM changes

All references to GC13 (General Condition No. 13) in the emission limit tables are removed and other appropriate SC (Special Condition) numbers replaced GC 13.

EU-BLACKOUT-BOOTH

SC VI.2: The permittee shall keep records of *quarterly* visual inspections of each exhaust filter (*ensuring that filters are installed snug and tight without gaps and holes*) or water wash particulate control system which include the dates and results of the inspections and the dates and reasons for repairs. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1213(3))**

EU-TUTONE:

SC III.1: The permittee shall not operate EU-TUTONE unless the thermal oxidizer for the oven is installed and operating properly *at or above the temperature based upon most recent stack test for VOC destruction efficiency (DE) (e.g., April 2015 stack test minimum temperature = 1360 °F based upon 3-hour average temperature that is in turn based upon 3 runs of 1-hour sampling).*² **(R 336.1910, R 336.1911, 40 CFR 64.6(c)(1)(i), (ii))**

EU-FINAL-REPAIR:

SC VI.1: The permittee shall conduct visual *inspections (ensuring that filters are installed snug and tight without gaps and holes)* of the associated exhaust filters for EU-FINAL-REPAIR on a quarterly basis

when coating has occurred filter. The permittee shall keep records of the *quarterly* inspections and maintenance activity to ensure proper operation of exhaust filters. **(R 336.1213(3))**

EU-SPOT-REPAIR-DECK:

SC VI.1: The permittee shall conduct inspections and maintain records of the inspections for the associated exhaust filters and carbon adsorption units for EU-SPOT-REPAIR-DECK on a monthly basis when coating has occurred. The permittee shall keep records of the *monthly* inspections and maintenance activity to ensure proper operation of exhaust filters and carbon adsorption units.² **(R 336.1702(d), R 336.1205, R 336.1901, R 336.1225)**

FG-RULE-331:

SC VI.1: The permittee shall implement and maintain a *monthly* check to ensure proper operation of the control equipment for each emission unit on a monthly basis. *Proper operation includes ensuring the bags/filters are installed in a leak-tight manner and hoppers are emptied promptly.* Any maintenance activity performed on the control device shall be recorded and kept on file which will be available to AQD upon request. *Proper operation of a particulate control system(s) as stated above is deemed to show compliance with SC I.1 emission limit.* **(R 336.1213(3))**

FG-PM-MISC:

SC III.1: The permittee shall not operate FG-PM-MISC unless the associated exhaust filters are installed and operating properly, *which includes ensuring that filters are installed snug and tight without gaps and holes. Proper operation of a particulate control system(s) as stated above is deemed to show compliance with SC I.1 emission limit.*² **(R 336.1910)**

SC VI.1: The permittee shall inspect the integrity of the exhaust filters on a monthly basis to ensure proper operation (*ensuring that filters are installed snug and tight without gaps and holes*). Any maintenance activity performed on the exhaust filters shall be recorded and kept on file. **(R 336.1213(3))**

CAM changes

EU-UNIPRIME, EU-TUTONE, FG-TOPCOAT:

Note: Changes/additions (*italicized*) in each emission unit are identical except special condition numbers. The following numbers correspond to EU-UNIPRIME

SC VI.5-8

5. *Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.* **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
6. *Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or*

malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**

7. *The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions.* **(40 CFR 64.9(b)(1))**
8. *The permittee shall properly maintain the monitoring system including keeping necessary parts for routine repairs of the monitoring equipment.* **(40 CFR 64.7(b))**

VII.6

6. *Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime.* **(40 CFR 64.9(a)(2)(ii))**

IX.1

1. *If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.* **(40 CFR 64.7(e))**