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| --- | --- | --- |
|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1909 | **STAFF REPORT** | ROP0000429 v5.0 |

**CWC Textron**

State Registration Number (SRN): B1909

Located at

1085 West Sherman Boulevard, Muskegon, Muskegon County, Michigan 49441

Permit Number: ROP0000429 v5.0

Staff Report Date: September 16, 2024

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) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), 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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|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1909 | September 16, 2024 - STAFF REPORT | ROP0000429 v5.0 |

**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; and Michigan’s Administrative Rules for Air Pollution Control promulgated under 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: | CWC Textron1085 West Sherman BoulevardMuskegon, Michigan 49441  |
| Source Registration Number (SRN): | B1909 |
| North American Industry Classification System (NAICS) Code: | 331511 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 202300101 |
| Responsible Officials: | Robert Meacham, Senior Environmental & Facility Engineer, 231-739-2794James Wright, Vice President, 231-739-2761 |
| AQD Contact: | Eric Grinstern, Environmental Quality Specialist616-558-0616 |
| Date Application Received: | June 22, 2023 |
| Date Application Was Administratively Complete: | June 22, 2023 |
| Is Application Shield in Effect? | Yes |
| Date Public Comment Begins: | September 16, 2024 |
| Deadline for Public Comment: | October 16, 2024  |

**Source Description**

CWC Textron is located at 1085 West Sherman Boulevard in Muskegon, Michigan. The facility is surrounded by commercial/retail businesses to the north, residential homes to the south, commercial/retail businesses to the east, and industrial/retail businesses to the west. The facility is a gray/ductile iron foundry that manufactures engine camshafts. Raw material used by the facility includes scrap metal and the facility is considered a secondary metal processing operation. The facility’s operations are centered around a cupola melt system. The facility has one cupola in which molten iron is generated. The cupola is controlled by afterburners and a wet cap, with combined quencher and venturi scrubber control followed by a demister. Iron tapped from the cupola flows through a desulfurization ladle prior to entering one of two 50-ton holding furnaces. Iron from the holding furnaces is either tapped and poured or inoculated in an inoculation vessel and then poured. The facility has one mold-making line that produces green sand molds for casting. The facility has various cast finishing operations.

The primary sources of emissions from the facility are the cupola, cast pouring, cooling, and shakeout operations.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2023**.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 642 |
| Lead (Pb) | 0.015 |
| Nitrogen Oxides (NOx) | 18 |
| PM10\* | 21 |
| Sulfur Dioxide (SO2) | 0.67 |
| Volatile Organic Compounds (VOCs) | 23 |

\*Particulate matter (PM) that has an aerodynamic diameter less than or equal to a nominal 10 micrometers.

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2023 by the facility:

|  |  |
| --- | --- |
| **Individual Hazardous Air Pollutants (HAPs) \*\***  | **Tons per Year** |
| Benzene | 2.00 |
| Toluene | 1.30 |
| Methanol | 1.09 |
| **Total Hazardous Air Pollutants (HAPs)** | **12.22** |

\*\*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 in the western portion of Muskegon County. The western portion of Muskegon County is currently designated by the United States Environmental Protection Agency (USEPA) as a non-attainment area with respect to the 8-hour ozone standard.

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

the potential to emit of carbon monoxide and particulate matter exceeds 100 tons per year. The stationary source has accepted legally enforceable permit conditions limiting the potential to emit of any single HAP to less than10 tons per year and the potential to emit of all HAPs combined to less than 25 tons per year. HAPs are regulated by Section 112 of the federal Clean Air Act. The source is limited to less than 9 tons per year of any single HAP and 22.5 tons per year of all HAPs combined with restrictions on materials used and associated recordkeeping.

EU-POURING, EU-COOLING, EU-SHAKEOUT, EU-WEST-CUPOLA-1, EU-DUCTILE-IRON, EU-BULK-BOND, and EU-MP-RBB at the stationary source were subject to review under the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because at the time of New Source Review permitting, the potential to emit of carbon monoxide was greater than 100 tons per year.

EU-WEST-CUPOLA-1 at the stationary source is subject to the National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources promulgated in 40 CFR Part 63, Subparts A and ZZZZZ. Requirements of this standard are included in the ROP.

FG-PROJECT-2021 at the stationary source is a flexible group that includes all equipment affected by the permitted increase to the facility-wide melt limit that was originally permitted in Permit to Install (PTI) No. 69-21. The Actual-to-Projected Actual analysis used to determine a non-significant emission increase exceeded reasonable possibility thresholds. During the review of PTI No. 69-21A, the permit engineer discovered that CWC Textron had taken an emissions reduction credit for another emission unit (the cupola; EU-WEST-CUPOLA-1) during the project in PTI No. 69-21 but did not provide an update on that credit with the application for PTI No. 69-21A. CWC Textron projected a minimum 20% reduction in PM and CO emissions from a future tune-up. Because the AQD will not accept a reduction in CO emissions (which is >100 tpy for the cupola) without stack testing data, CWC Textron is required to stack test to show that CO emissions were in fact reduced. Additionally, the facility is required to calculate and maintain records of the annual emission of VOC and CO from FG-PROJECT-2021.

Compliance testing, as required by MI-ROP-B1909-2019a, was conducted on April 11-18, 2023, to verify particulate matter (PM, PM10, and PM2.5), VOC, NOx, and CO emission rates from EU-POURING. Testing documented emissions exceeding the permitted limits for PM10, PM2.5, NOx, and VOC. The facility submitted a permit to install application seeking an increase in the allowed NOx and VOC emission rates. PTI 69-21A was approved on April 8, 2024, increasing the allowed NOx emission rate from 0.01 pounds per ton of metal to 0.14 pounds per ton of metal. The PTI also approved a VOC emission rate increase from 0.14 pounds per ton of metal to 0.50 pounds per ton of metal. Additionally, on January 17-18, 2024, the facility conducted testing to verify PM10, PM2.5, NOx, and VOC emission rates from EU-POURING. The results of retesting documented compliance with the PM10 and PM2.5 emission limits. Additionally, testing also documented compliance with the NOx emission limit of 0.14 pounds per ton of metal. Testing also demonstrated compliance with the new VOC emission limit, as well as the original VOC emission limit of 0.14 pounds per ton of metal.

The facility is currently in compliance with applicable requirements and no schedule of compliance is necessary.

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."

EU-BULK-BOND, EU-DUCTILE-IRON, EU-NEW-SAND, EU-FINISHING, and EU-CLEAN do not have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring (CAM) rule pursuant to 40 CFR Part 64, because the units do not have potential pre-control emissions over the major source thresholds. EU-BULK-BOND and EU-NEW-SAND are storage vessels that control particulate emissions with bin vent filters. EU-DUCTILE-IRON and EU-CLEAN are iron inoculation and iron finishing operations, respectively, that control particulate emissions with fabric filter collectors. Potential pre-control emissions of particulate matter for each of the emission units was determined to be less than the major source threshold.

The emission limitation(s) or standard(s) for PM or Total Metal HAP at the stationary source (FG-MACT-ZZZZZ) with the underlying applicable requirement(s) of 40 CFR 63, Subpart ZZZZZ, from EU-WEST-CUPOLA-1 are exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR 64.2(b)(1)(i) because the PM limit of 0.8 pounds per ton of metal charged and the Total Metal HAP limit of 0.06 pound per ton of metal charged meet the CAM exemption for New Source Performance Standards (NSPS) or Maximum Achievable Control Technology (MACT) standards proposed after November 15, 1990.

EU-WEST-CUPOLA-1, EU-MP-RBB, EU-ACS-SAND, and EU-SHAKEOUT are subject to CAM.

| **Emission Unit/Flexible group ID** | **Pollutant/ Emission Limit** | **UAR(s)** | **Control Equipment** | **Monitoring (Include Monitoring Range)** | **Emission Unit/Flexible Group for CAM** | **PAM?\*** |
| --- | --- | --- | --- | --- | --- | --- |
| EU-WEST-CUPOLA-1 | Particulate Matter (PM)/0.15 lbs. per 1,000 lbs. of exhaust gases, calculated on a dry gas basis. | R336.1331(1)(a), Table 31(D)(1) | Wet Cap, High Energy Venturi Scrubber, High Velocity Mist Eliminator | Scrubber liquid flow rate for the wet cap (more than 125 gpm).Scrubber liquid flow rate for High Energy Venturi Scrubber (more than 150 gpm).Water pressure rate to the high energy venturi scrubber (46-80 psi); pressure differential across the high energy venturi scrubber (30-56 PSI), pressure drop across high velocity mist eliminator (0 - 3 PSI). | EU-WEST-CUPOLA-1 | No |
| EU-MP-RBB | Particulate Matter (PM)/0.010 lbs. per 1,000 lbs. of exhaust gases, calculated on a dry gas basis. | R336.1331(1)(c) | Dust Collector Baghouses  | Particle sensor current for DC#1, DC#6, DC#13 (0-1000 pA); Pressure differential across the baghouses; (DC#1: 7-12” WC, DC#6: 7-12” WC, DC#13: 8-13” WC ) | EU-MP-RBB | No |
| EU-ACS-SAND | Particulate/0.10 lbs. per 1,000 lbs. of exhaust gases, on a dry gas basis. | R336.1331(1)(a) Table 31(J) | Dust Collector Baghouse | Pressure differential monitoring (DC#19: 3-7” WC)  | EU-ACS-SAND | No |
| EU-SHAKEOUT | Particulate/0.10 lbs. per 1,000 lbs. of exhaust gases, on a dry gas basis.  | R336.1331(1)(a) Table 31(J) | Baghouses | Particle senser current for DC#1 and DC #6 (0-1000 pA); Pressure differential monitoring(DC#6: 7-12”, DC#17: 7-12”, DC#20: 3-7”)  | FG-PARTICULATE | No |

\*Presumptively Acceptable Monitoring (PAM)

The CAM Plan provides sufficient monitoring of the operational parameters for each of the control devices.

EU-WEST-CUPOLA-1 Venturi Scrubber

Pressure differential is one of the most critical indicators of performance for most wet scrubber designs. Pressure differential remains fairly constant and reflects normal operation of the liquid flow and gas flow through the system. Pressure differential is particularly important for scrubber designs, such as venturi scrubbers, that operate with relatively high-pressure differentials. The control efficiency of a venturi scrubber is a function of the total energy consumption within the scrubber, and total energy consumption is largely a function of the pressure differential across the scrubber. The pressure differential shows whether there is normal gas flow and normal liquid flow. Poor gas-liquid distribution can decrease efficiency without affecting pressure differential; plugging can result in higher pressure differential without corresponding increase in control.

Gas flow rate is often a constant based on process conditions and is the major design consideration of the scrubber; the liquid-to-gas (L/G) ratio is determined and maintained by the scrubber liquid flow rate. Scrubber liquid flow rate is a key indicator of performance, provided the liquid is being properly distributed or atomized, and the liquid-gas interface is maintained. Under these conditions, higher liquid flow rates are indicative of higher levels of control. Low liquid flow causes a decrease in pressure differential and lower collection efficiency.

Dust Collector, DC #6 for EU-MP-RBB and EU-SHAKEOUT

The performance of fabric filters is most closely associated with the condition of the filter bags; bag tears and breaks can result in dramatic losses in control efficiency. PMT2 Particulate Transmitter may provide continuous and immediate feedback and can be very sensitive to small changes in PM emission increases indicating bag leaks. The Particulate Transmitter is designed to measure particulate emission levels from dust collector discharge. Using DC coupled electrostatic induction sensing technology, the transmitter monitors pA current that is generated as particulate passes near the probe. The inductive effect takes place when the particulate passes near the probe. A microprocessor filters and processes the signal into an output that is linear to the mass concentration of particulate. The PMT2 is designed to find a baseline under ideal operating conditions and allow an operator to watch the signal for increases that would signify the bags or filters are starting to wear or break. The increase in pA output indicates a rising level of particulate in the air stream which indicates that the filters are either wearing out or broken.

EU-MP-RBB, EU-ACS-SAND and EU-SHAKEOUT Dust Collectors

An increase in pressure differential is indicative of fabric blinding or decreased permeability and a decrease in pressure differential is indicative of change in operation. The characteristic differential pressure is dependent on the baghouse design, including the type of cleaning mechanism and bag type. When the fabric filter bags are newly installed, the filter cake builds up on the bags and the pressure differential increases steadily. Once the bags are in operation and the filter cake has built up on the bags, the pressure differential remains fairly constant. As pulses are applied to clean the bags, the pressure differential will change slightly but overall remains constant. However, sudden changes in pressure differential can be a good indicator of several potential problems associated with the operation of a fabric filter. An increase in pressure differential may indicate blinding of the fabric. A change in pressure differential also can indicate the effectiveness of the cleaning mechanism. Because of the large, expected range of pressure drop throughout normal operation, pressure differential monitoring is insensitive to small leak formation and is useful only as a general guide best used in conjunction with other monitoring tools (e.g., periodic inspection).

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)**

The following table lists all individual PTIs that were incorporated into previous ROPs. PTIs issued after the effective date of ROP No. MI-ROP-B1909-2019 are identified in Appendix 6 of the ROP.

| **PTI Number** |
| --- |
| 264-72C | 185-79 | 966-89 | 984-85 |
| 809-86A | 486-73B | 648-82 | 163-86A |
| 425-77 | 965-89 | 121-79 | 975-78A |
| 342-77 | 177-98 | 190-98 | 437-99 |
| 33-07 | 228-03 | 139-14 |  |

**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 Not in the 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.

| **PTI Exempt****Emission Unit ID** | **Description of PTI****Exempt Emission Unit** | **Rule 212(4)****Citation** | **PTI Exemption Rule Citation** |
| --- | --- | --- | --- |
| EU-AIR-MAKE-UP | (20) Gas fired make-up air units | Rule 212(4)(c) | Rule 282(2)(b)(i) |
| EU-TEMP-OVEN | (4) Tempering ovens used to heat metal by use of natural gas | Rule 212(4)(c) | Rule 282(2)(a)(i) |
| EU-CONTAINERS | (2) 30,000 Gallon propane storage tanks(4) 500 Gallon diesel storage tank(1) 500 Gallon gasoline storage tank(3) Nitrogen storage tanks(2) Oxygen storage tanks | Rule 212(4)(d) Rule 212(3)(e) | Rule 284(2)(b), (d),(g),(j) |

**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 EGLE, 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 Heidi Hollenbach, Grand Rapids 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 Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1909 | November 8, 2024 - STAFF REPORT ADDENDUM | ROP0000429 v5.0 |

**Purpose**

A Staff Report dated September 16, 2024, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. 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 Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

**General Information**

|  |  |
| --- | --- |
| Responsible Officials: | Robert Meacham, Senior Environmental & Facility Engineer, 231-739-2794James Wright, Vice President, 231-739-2761 |
| AQD Contact: | Eric Grinstern, Environmental Quality Specialist616-558-0616 |

**Summary of Pertinent Comments**

Comments were received from USEPA during the 30-day public comment permit. Comments were received on October 15, 2024, and are outlined below.

EPA Comment No. 1:

Special condition VI.1 for EU-BULK-BOND requires non-certified visible emission readings only once per week while the emission unit is operating as a means of monitoring compliance with the applicable emission limit. This potentially leaves room for the emission unit in question to be operating and not have any monitoring that would assure compliance with the applicable PM emission limits under SC.I 1 & 2. EPA suggests this condition be revised to include language that provides for a monitoring method to be required whenever the unit is actually operating. EPA further suggests that any other similar condition in the ROP that has potential for no monitoring to be required while an emission unit is actually operating to be revised as well and include such language necessary to ensure appropriate monitoring.

AQD Response No. 1:

In response to USEPA’s suggestion to revise visible emission monitoring language to require monitoring whenever an emission unit is actually operating, the following modifications were made:

EU-BULK-BOND, Special condition VI.1 requires weekly non-certified visible emission readings, although the facility actually conducts daily non-certified visible emission observations and records the results as part of the facility’s “Daily Environmental Check Sheet”. Special condition VI.1. was modified to require daily non-certified visible emissions readings while the emission unit is operating.

EU-NEW-SAND, Special condition VI.1 requires weekly non-certified visible emission readings, although the facility actually conducts daily non-certified visible emission observations and records the results as part of the facility’s “Daily Environmental Check Sheet”. Special condition VI.1. was modified to require daily non-certified visible emissions readings while the emission unit is operating.

EPA Comment No. 2:

EU-DUCTILE-IRON contains an emission limit of 10% opacity under SC I.4 with the only applicable monitoring/testing method referenced being “verification of visible emissions […] performed and documented once weekly by non-certified visible emissions readings while the emission unit is operating, per Appendix 3” under SC VI.4. It is not clear how a once weekly verification of visible emissions by a non-certified reading ensures compliance with a continuous 10% opacity limit under this condition or in Appendix 3. EPA suggests for this and any other similar condition within the ROP with monitoring that is related to a specific opacity to have an approved testing method included when necessary.

AQD Response No. 2:

In response to USEPA’s suggestion to have an approved testing method with monitoring related to a specific opacity, the following modifications were made:

EU-DUCTILE-IRON, Special condition VI.4 requires weekly non-certified visible emission readings, although the facility actually conducts daily non-certified visible emission observations and records the results as part of the facility’s “Daily Environmental Check Sheet”. Special condition VI.4. was replaced with a visible emission condition that requires daily non-certified visible emissions readings while the process is operating and requires a USEPA Method 9 certified emission observation to be conducted if any visible emissions are detected in order to determine the actual opacity.

EU-MP-RBB, Special condition VI.1 requires weekly non-certified visible emission readings, although the facility actually conducts daily non-certified visible emission observations and records the results as part of the facility’s “Daily Environmental Check Sheet”. Special condition VI.1 was replaced with a visible emission condition that requires daily non-certified visible emissions readings while the process is operating and requires a USEPA Method 9 certified emission observation to be conducted if any visible emissions are detected in order to determine the actual opacity.

EPA Comment No. 3:

The CAM plan for this ROP also includes specific opacities (10-20%) that use non-certified visible emission observations to be taken daily as their monitoring requirements. It is not clear though how a non-certified visible emission observation taken daily is capable of ensuring compliance with the specific opacities listed within the plan. In addition, the QA/QC component of the CAM plan only lists “routine preventative maintenance” as part of its criteria. EPA suggests that the monitoring requirements for opacity as specified by the CAM plan be revised to also include an applicable approved test method instead of just a daily non-certified visible emission observation, and for the QA/QC component to be more specific with how it will ensure that the other sections of CAM continue to reasonably assure compliance with all applicable requirements.

AQD Response No. 3:

In response to USEPA’s suggestion to have an approved testing method for opacity instead of just a daily non-certified visible emission observation with monitoring related to a specific opacity, the following modifications were made:

EU-MP-RBB: the facility was requested to modify the CAM plan monitoring requirements to require a USEPA Method 9 certified emissions observation if visible emissions are detected. The CAM monitoring requirement will then match the modifications made to Special condition VI. 1, requiring USEPA Method 9 certified emission observations if visible emissions are detected. EU-MP-RBB has an opacity limit of 10%.

EU-ACS-SAND: the facility was requested to modify the CAM plan monitoring requirements to require a USEPA Method 9 certified emissions observation if visible emissions are detected. EU-ACS-SAND does not have an opacity limit more restrictive than the 20% opacity limit in General Condition No. 11.

EU-WEST-CUPOLA-1: the facility was requested to modify the CAM plan monitoring requirements to require a USEPA Method 9 certified emissions observation if visible emissions are detected. EU-WEST-CUPOLA-1 does not have an opacity limit more restrictive than the 20% opacity limit in General Condition No. 11.

EU-SHAKEOUT: the facility was requested to modify the CAM plan monitoring requirements to require a USEPA Method 9 certified emissions observation if visible emissions are detected. EU-SHAKEOUT does not have an opacity limit more restrictive than the 20% opacity limit in General Condition No. 11.

In response to USEPA’s suggestion for the QA/QC component of the CAM plan to be more specific with how it will ensure that the other sections of CAM continue to reasonably assure compliance with all applicable requirements, the facility was requested to expand the QA/QC component of the CAM plan to provide additional information and be more specific.

**Changes to the September 16, 2024 Draft ROP**

Changes were made to the ROP in response to comments received by USEPA on October 15, 2024.

Below is a summary of changes made:

EU-BULK-BOND: Special Condition VI.1. was modified to require daily non-certified visible emissions readings while the emission unit is operating. The condition previously required weekly non-certified visible emission readings.

EU-NEW-SAND: Special Condition VI.1. was modified to require daily non-certified visible emissions readings while the emission unit is operating. The condition previously required weekly non-certified visible emission readings.

EU-DUCTILE-IRON: Special Condition VI.4. was replaced with a visible emission condition that requires daily non-certified visible emissions readings while the process is operating and requires a USEPA Method 9 certified emission observation to be conducted if any visible emissions are detected in order to determine the actual opacity. The condition previously required weekly non-certified visible emission readings. The new condition:

The permittee shall perform and document non-certified visible emissions observations on a daily basis when operating during daytime hours. Each observation shall be for a minimum timeframe of 5 minutes. If during the observations there are any visible emissions detected, a USEPA Method 9 certified emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from the emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reasons for any visible emissions in excess of 10% opacity observed, and any corrective actions taken shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**

EU-MP-RBB: Special Condition VI.1. was replaced with the PTI shell visible emission condition that requires daily non-certified visible emissions readings while the process is operating and requires a USEPA Method 9 certified emission observation to be conducted if any visible emissions are detected in order to determine the actual opacity. The condition previously required weekly non-certified visible emission readings. The new condition:

The permittee shall perform and document non-certified visible emissions observations on a daily basis when operating during daytime hours. Each observation shall be for a minimum timeframe of 5 minutes. If during the observations there are any visible emissions detected, a USEPA Method 9 certified emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from the emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reasons for any visible emissions in excess of 10% opacity observed, and any corrective actions taken shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**

CAM Plan: For EU-MP-RBB, EU-ACS-SAND, EU-WEST-CUPOLA-1, and EU-SHAKEOUT, the facility was requested to modify the CAM plan monitoring requirements to require a USEPA Method 9 certified emissions observation if visible emissions are detected. The facility will submit the modified CAM plan, with the modified visible emission requirements, prior to issuance of the ROP.

CAM Plan: The facility was requested to expand the QA/QC component of the CAM plan to provide additional information and be more specific. The facility will submit the modified CAM plan, with the expanded QA/AC, prior to issuance of the ROP.