

State Registration Number

B2835

RENEWABLE OPERATING PERMIT

December 20, 2019 - STAFF REPORT ADDENDUM

ROP Number

MI-ROP-B2835-
20XX

Purpose

A Staff Report dated June 17, 2019, 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

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Summary of Pertinent Comments

Comments were received from USEPA during the 30-day public comment period. The comments were received on July 17, 2019 and are outlined below.

USEPA Comment 1:

EUBOILER1, EUBOILER2, EUSDA_U3, and EUBYPRODUCT Compliance Assurance Monitoring (CAM) applicability. Although the Staff Report indicates that the particulate matter (PM, PM10, PM2.5) limits in EUBOILER1, EUBOILER2, EUSDA_U3, and EUBYPRODUCT are subject to the 40 CFR Part 64 CAM requirements, these respective Emission Unit sections of the permit do not associate any emissions limits with the CAM requirements. Please revise the permit as necessary to identify which pollutant specific emission units (i.e., which emission limits in EUBOILER1, EUBOILER2, EUSDA_U3, and EUBYPRODUCT) are subject to CAM, in accordance with 40 CFR 64.2(b). For example, the Monitoring/Testing Method column in the EU emissions tables could reference the applicable CAM requirements.

AQD Response:

The Particulate Matter (PM) emission limits for EUBOILER1 and EUBOILER2 are subject to Compliance Assurance Monitoring, as noted in the Staff Report. While the CAM Monitoring and Recordkeeping requirements are located in FGBOILER12, the Emission Limit tables in EUBOILER1 and EUBOILER2 have been updated to reference the CAM applicability for the associated emission limit that is subject to CAM. For both, the Monitoring/Testing Method column of the Emission Limit table has been updated to include a reference to FGBOILER12, Special Condition (SC) VI.1, and the requirement for a Continuous Opacity Monitoring System (COMS) that is used as the indicator for compliance with the CAM requirements.

The Emission Limit tables for EUBYPRODUCT and EUSDA_U3 have also been updated to include a reference to the CAM requirements in the Monitoring/Testing Method column for the appropriate PM limit. The Monitoring/Testing Method column now references SC VI.1, the requirement to conduct Visible Emissions monitoring, which is the primary indicator for compliance with the emission limit.

USEPA Comment 2:

EUBOILER3 CAM exemption. The Staff Report indicates that the particulate matter limits for EUBOILER3 are exempt from CAM because the permit includes a continuous compliance determination method. However, the permit does not include particulate matter CEMs in the respective Monitoring/Testing Method column of the emissions table. Please revise the permit as necessary to address the continuous compliance determination method exemption requirements, in accordance with 40 CFR 64.2(b)(1)(vi).

AQD Answer:

As indicated in the Staff Report, the particulate matter emission limits for EUBOILER3 are exempt from CAM because the permit includes a continuous compliance determination method. EUBOILER3 is equipped with a Particulate Matter CEMS as identified in EUBOILER3 SC VI.4. The Emission Limit table, specifically EUBOILER3, SC I.3, I.4, and I.5 have been updated to include the reference to SC VI.4 in the Monitoring/Testing Method column.

USEPA Comment 3:

Staff Report, CAM nitrogen oxides and sulfur dioxides exemptions for EUBOILER1, EUBOILER2, and EUBOILER3. The Staff Report describes several exemptions from CAM for nitrogen oxides and sulfur dioxides on the basis that the units are subject to the Title IV Acid Rain Program monitoring requirements. In accordance with 40 CFR 64.2(b), please address the CAM non-applicability analysis for the nitrogen oxides and sulfur dioxides emission limits in EUBOILER1, EUBOILER2, and EUBOILER3 (i.e., those limits not required by Title IV). For example, it appears that the relevant exemption may be 40 CFR 64.2(b)(1)(vi)- emission limitations for which the Title V permit specifies a continuous compliance determination method.

AQD Response:

As indicated in the Staff Report, nitrogen oxide and sulfur dioxide emissions from EUBOILER1, EUBOILER2, and EUBOILER3 are exempt from the requirements of CAM pursuant to 40 CFR 64.2(b)(1)(vi), because all of the emission limitations are monitored on a continuous basis, meeting the CAM exemption for a continuous compliance determination method. All of the units are equipped with a continuous emissions monitoring system (CEMS) for nitrogen oxide and sulfur dioxide emissions. All of the units are also equipped with a gas flow monitor, allowing them to directly calculate nitrogen oxide and sulfur dioxide emissions. No changes have been made to the permit as a result of this comment.

USEPA Comment 4:

EUBOILER1, EUBOILER2, EUBOILER3, EUCOALHAND, EUSDA_U3, EUDSI_U12, and EUBYPRODUCT malfunction abatement plans (MAP). Please ensure that any malfunction abatement plans addressed in the permit are readily accessible in the permit record, including online Internet availability if feasible. As addressed by USEPA's March 5, 1996 "White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program," information cited or cross-referenced in permits should be current and readily available to the permitting agency and to the public.

AQD Response:

EUBOILER1, EUBOILER2, EUBOILER3, EUCOALHAND, EUSDA_U3, EUDSI_U12, and EUBYPRODUCT all have malfunction abatement plans. These plans were erroneously omitted from being readily available via EGLE AQD's website. These plans have since been made available and are posted to EGLE AQD's website. No changes were made to the permit as a result of this comment.

USEPA Comment 5:

EUCOALHAND, Section VI. Please clarify the definition of excursion, pursuant to 40 CFR 64.6(c)(2), and revise the permit or provide additional justification as appropriate. An excursion is defined for purposes of responding to exceedances or excursions. In particular:

1. SC VI.1. does not require visible emission observations for 2 hours;
2. The corrective actions in SC VI.5 may not be required upon observation of any visible emissions, but rather would be required only after observed emissions exceeded 2 continuous hours;
3. The pressure drop ranges in SC VI.2 are not addressed by the definition of excursion or the corrective action provisions.

AQD Response:

Additional clarification of the definition of excursion pursuant to 40 CFR 64.6(c)(2) was provided in Section VI of EUCOALHAND in order to address the defined deficiencies listed in USEPA Comment 5. The previous duration of 2 hours has been updated to a reflect a shorter duration of one (1) hour for which corrective action must be taken. It has also been noted in Section VI of EUCOALHAND that if there is a break in the observations of the visible emissions (VEs), it is assumed that the emissions are continuous up to the point where the emission point is observed again and there are no more visible emissions. A reference to the MAP was also included as a requirement for returning the pollutant specific emission unit to normal operation. SC VI. 1 also now indicates that corrective action is initiated upon detection of any visible emissions for any duration, rather than only when an excursion is detected.

The facility also utilizes a secondary indicator, although not specified in the permit, it is specified in the CAM plan. The secondary indicator of pressure drop and the recording of the pressure drop is part of the CAM plan developed and implemented by the facility.

USEPA Comment 6:

EUSDA_U3, Section VI. Please clarify the definition of excursion, pursuant to 40 CFR 64.6(c)(2), and revise the permit or provide additional justification as appropriate. An excursion is defined for purposes of responding to exceedances or excursions. In particular:

1. SC VI.1. does not require visible emission observations for 2 hours;
2. The corrective actions may not be required upon observation of any visible emissions, but rather would be required only after observed emissions exceeded 2 continuous hours.

AQD Response:

Additional clarification of the definition of excursion pursuant to 40 CFR 64.6(c)(2) was provided in Section VI of EUSDA_U3 in order to address the defined deficiencies listed in USEPA Comment 6. The previous duration of 2 hours has been updated to a reflect a shorter duration of one (1) hour for which corrective action must be taken. It has also been noted in Section VI of EUSDA_U3 that if there is a break in the observations of the visible emissions (VEs), it is assumed that the emissions are continuous up to the point where the emission point is observed again and there are no more visible emissions. A reference to the MAP was also included as a requirement for returning the pollutant specific emission unit to normal operation. An additional condition (now SC VI.2) was added for clarification in regard to the specific pieces

of equipment that have CAM subject emission limits. Additionally, SC VI.2 now indicates that corrective action is initiated upon detection of any visible emissions for any duration, rather than only when an excursion is detected.

The facility also utilizes a secondary indicator, although not specified in the permit, it is specified in the CAM plan. The secondary indicator of pressure drop and the recording of the pressure drop is part of the CAM plan developed and implemented by the facility.

USEPA Comment 7:

EUBYPRODUCT, Section VI. Please clarify the definition of excursion, pursuant to 40 CFR 64.6(c)(2), and revise the permit or provide additional justification as appropriate. An excursion is defined for purposes of responding to exceedances or excursions. In particular:

1. SC VI.1. does not require visible emission observations for 2 hours;
2. The corrective actions provisions may not be required upon observation of any visible emissions, but rather would be required only after observed emissions exceeded 2 continuous hours;
3. The pressure drop ranges in SC VI.2 are not addressed by the definition of excursion or the corrective action provisions.

AQD Response:

Additional clarification of the definition of excursion pursuant to 40 CFR 64.6(c)(2) was provided in Section VI of EUBYPRODUCT in order to address the defined deficiencies listed in USEPA Comment 7. The previous duration of 2 hours has been updated to a reflect a shorter duration of one (1) hour for which corrective action must be taken and defined as an excursion. It has also been noted in Section VI of EUBYPRODUCT that if there is a break in the observations of the visible emissions (VEs), it is assumed that the emissions are continuous up to the point where the emission point is observed again and there are no more visible emissions. A reference to the MAP was also included as a requirement for returning the pollutant specific emission unit to normal operating manner. SC VI. 1 also now indicates that corrective action is initiated upon detection of any visible emissions for any duration, rather than only when an excursion is detected.

The facility also utilizes a secondary indicator, although not specified in the permit, it is specified in the CAM plan. The secondary indicator of pressure drop and the recording of the pressure drop is part of the CAM plan developed and implemented by the facility.

USEPA Comment 8:

FGBOILER12, Section VI. Please clarify the definition of excursion, pursuant to 40 CFR 64.6(c)(2), and revise the permit or provide additional justification as appropriate. An excursion is defined for purposes of responding to exceedances or excursions. In particular:

1. The corrective action provisions may not be required when opacity readings reach 20%, but rather would be required only after two or more consecutive 1-hour block average opacity values are greater than 20%;
2. The bag leak detection system monitoring is not addressed by either the definition of excursion or the corrective action provisions.

AQD Response:

FGBOILER12, SC VI.1 has been updated to include additional clarification as to the definition of an excursion pursuant to 40 CFR 64.6(c)(2) by changing the definition of an excursion as any two (2) or more consecutive 1-hour block average opacity values greater than 15%. This will provide more assurance that the PM limits are not exceeded during an excess opacity event. The facility has supplied testing data to correlate opacity levels with particulate emissions, therefore any increase in opacity levels will be indicative

of an increase in the particulate emissions. The facility utilizes a continuous opacity monitor (COMS) for both EUBOILER1 and EUBOILER1 to continuously monitor the opacity of each of the boilers.

FGBOILER12, SC VI.8 was also updated to reference the MAP that the facility maintains and uses when an alarm is triggered per their CAM plan.

USEPA Comment 9:

Please verify whether the following cross reference citations within the permit are correct, and revise the permit as necessary:

1. EUBOILER2, SC I.5. The particulate matter Monitoring/Testing Method refers to SC V.1 instead of SC V.2.
2. EUBOILER3, SC VI.3. refers to SC I.11, I.12, I.13, I.17 and I.18 instead of SC I.10, I.11, I.15, and I.16.
3. EUACI_U123, SC I.1. The opacity Monitoring/Testing Method refers to SC VI.2 instead of SC VI.1.
4. EUDSI_U12, SC I.2, 3, and 4. The Monitoring/Testing Method refers to SC V.1. instead of SC VI.1.

AQD Response:

The cross-referenced citations mentioned in USEPA Comment 9 were erroneous in the draft permit. The citations have been updated in the ROP.

Changes to the June 17, 2019 Draft ROP

In order to address USEPA Comment 1, the Monitoring/Testing Method column of EUBOILER1 and EUBOILER2 for the Particulate Matter (PM) emission limits subject to CAM now includes a reference to the CAM requirements in FGBOILER12. The Monitoring/Testing Method columns of EUBYPRODUCT and EUSDA_U3 were also updated to include a reference to the special conditions within those emission units that reference CAM.

In order to address USEPA Comment 2, the Monitoring/Testing Method column of EUBOILER3, SC I.3, I.4, and I.5 have been updated to include a reference to EUBOILER3, SC VI.4.

In order to address USEPA Comment 5, the monitoring/recordkeeping requirements of EUACOALHAND have been updated. Specifically, SC VI.1 was updated to specify how the observations of visible emissions are to occur and address any breaks in the observations. This condition also indicates that corrective action will be initiated in any event of visible emission regardless of the duration. SC VI.2 was updated to reflect the duration of visible emissions that qualifies as an excursion. SC VI.4 was updated to reference the MAP as a requirement for returning the pollutant specific emission unit to normal operating manner.

In order to address USEPA Comment 6, the monitoring/recordkeeping requirements of EUSDA_U3 have been updated. Specifically, SC VI.2 was updated to specify how the observations of visible emissions are to occur and address any breaks in the observations. This condition also indicates that corrective action will be initiated in any event of visible emission regardless of the duration. SC VI.2 was updated to reflect the duration of visible emissions that qualifies as an excursion. SC VI.4 was updated to reference the MAP as a requirement for returning the pollutant specific emission unit to normal operating manner.

In order to address USEPA Comment 7, the monitoring/recordkeeping requirements of EUBYPRODUCT have been updated. Specifically, SC VI.2 added to specify how the observations visible emissions are to occur and address any breaks in the observations. This condition also indicates that corrective action will be initiated in any event of visible emission regardless of the duration. SC VI.3 includes new duration of visible emissions that qualifies as an excursion. SC VI.4 was updated to reference the MAP as a requirement for returning the pollutant specific emission unit to normal operating manner.

In order to address USEPA Comment 8, the monitoring/recordkeeping requirements of FGBOILER12, SC VI.1, and VI.8 were updated to more clearly define the definition of an excursion for the COMS unit. Additionally, the facility provided data correlating the use of opacity and particulate emissions. This correlation provides additional assurance that with some opacity, the particulate emission limits are not exceeded. Additionally, the definition of an excursion for the boilers was updated to be 15% opacity, a reduction from 20% opacity.

In order to address USEPA Comment 9, all citations mentioned in the comment were cross-checked and updated with the correct reference.

The Delegation status for 40 CFR Part 63, Subpart DDDDD changed during the comment period, and Michigan now has full delegation of this Federal Regulation. Therefore, EUAUXBLR12 and FGAUXBLRS3 were updated. Various conditions throughout EUAUXBLR12 and FGBLRS3 were updated, primarily incorporating existing federal rule language.

After discussion with the permittee, an additional condition was added to EUCOALHAND as Special Condition VI.8 requiring non-certified visible emissions.

Additionally, it was noted during this review that there is an error in the emission limits for CO and PM for EUWPDIESEL. Since these emission limits were incorporated via a Permit to Install (PTI), this error will be fixed via a PTI, and a subsequent modification to the ROP.