

State Registration Number  
M4782

**RENEWABLE OPERATING PERMIT**  
**NOVEMBER 20, 2023 - STAFF REPORT ADDENDUM**

ROP Number  
MI-ROP-M4782-20XX

**Purpose**

A Staff Report dated September 11, 2023, 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 EPA during the 30-day public comment period.

EPA Comment No. 1:

The draft ROP incorporates several requirements which cite 40 CFR Part 63 Subpart DD (MACT DD) as the underlying applicable authority. However, it is unclear from the permit which specific requirements from MACT DD are being incorporated or cited to establish the authority for each permit condition. 40 CFR 70.6(a)(1)(i) requires, in relevant part, for Part 70 permits to specify and reference the origin of and authority for each term or condition in the permit. In order to clearly identify the authority for each condition, we request that you evaluate the following permit conditions to determine which MACT DD requirement apply and, as necessary, revise the citation to origin and authority to specifically identify the underlying applicable requirement.

- a. FGEAST SC III.1, IV.1, IV.2, IV.3, IV.4, IV.5, IV.7, V.1, V.2, VI.1, VI.2, and VI.4
- b. FGWEST SC VI.9, VI.10
- c. FGLIQWASTETKS SC II.1, VI.5, VI.6

AQD Response No. 1:

The underlying PTI includes global citations for MACT DD as underlying applicable requirements (UARs) which was standard for the time the PTI was written. The specific requirements applicable to the source for MACT DD are in flexible group FGMACTDD with the specific UAR listed. To make clear the authority for each condition within the PTI, the specific UAR for MACT DD was added to the global citation for MACT DD in applicable special conditions from the PTI. For FGEAST SC VI.4, MACT DD is not an underlying applicable requirement for the special condition and the global citation for MACT DD was removed.

EPA Comment No. 2:

FGEAST SC IV.5 requires the permittee to determine the negative pressure in the waste treatment building using smoke tubes (or alternative method as approved by AQD) and by visual observation of the air movement and direction. Although this condition does not specify the frequency for conducting this visual observation, we understand that FGEAST SC V.2 is intended to apply to this determination and will occur annually. We request that you clarify for the record whether FGEAST SC V.2 and its observation frequency applies to the visual observation required in FGEAST SC IV.5. We further request that you clarify whether the notification requirement specified in FGEAST SC V.7 applies to this visual observation. We note that SC V.2 is a testing/sampling requirement applicable to FGEAST, but the condition is unclear regarding the requirement to submit a notification before conducting this annual visual observation. If the notification requirement is intended to apply to the annual visual observation, we request that you revise the permit as appropriate to more clearly specify that the permittee must submit a notification to EGLE prior to the annual visual observation.

AQD Response No. 2:

The testing required in FGEAST SC V.2 for VOC capture efficiency is part of the compliance demonstration for FGEAST SC IV.1, IV.2, and IV.5. The testing required in FGEAST SC V.2 is conducted at least once every year so, at a minimum, annually. Testing methods for VOC, hydrogen chloride, and HAPs are listed in FGEAST SC V.3 which also includes the requirements to submit a test plan prior to testing and a report of test results after testing. The testing method for VOC capture efficiency using Procedure T, found in 40 CFR 52.741, Appendix B was added to the table of test methods so it is clear that a testing plan must be submitted prior to the testing required in FGEAST SC V.2, and a test report of results must be submitted after testing. Testing notifications for all performance testing which includes VOC capture efficiency are required in FGEAST SC V.7 not less than 30 days before testing.

EPA Comment No. 3:

FGEAST SC VI.8 and VI.9 requires the permittee to maintain the caustic scrubber flow rate between 225 gpm and 350 gpm and the caustic scrubber pH at 7.3 or higher. However, the September 20, 2016 Preventative Maintenance and Malfunction Abatement Program for US Ecology Company, Michigan (MAP) specifies different levels. FGEAST SC III.2 requires the permittee to implement the MAP. In particular, the MAP in Section 5.3.4 states that the caustic scrubber flow rate will be maintained between 225 gpm and 300 gpm. This provision of the MAP also specifies that the caustic scrubber pH is tracked "to ensure the pH remains above a Low-Low pH level of 7.2". Since the values differ, it is unclear which flow rate range and minimum pH applies to the permittee. To resolve potential confusion and to ensure compliance with both the permit and the MAP, we request that you verify which parameter range the permittee must maintain and either revise the permit to be consistent with the MAP, revise the MAP to be consistent with the permit, or provide justification explaining why the values specified in the permit may differ from those within the MAP.

AQD Response No. 3:

An updated Preventative Maintenance and Malfunction Abatement Program was provided by US Ecology. In the plan dated 10-24-2023, updates to Section 5.3.4 to align with the requirements in FGEAST SC VI.8 and VI.9 were made.

EPA Comment No. 4:

FGEAST SC VI.21 defines an excursion for CAM purposes. As written, FGEAST SC VI.21 specifies the level at which an excursion will be deemed to occur but does not specify the averaging period associated with an exceedance. 40 CFR 64.6(c)(2) requires the permit to specify the level at which an excursion will be deemed to occur, including the appropriate averaging period associated with each excursion. To ensure that a CAM excursion is defined consistent with 40 CFR 64.6(c)(2), we request that you revise the permit condition to specify an appropriate averaging period for each specified indicator level. We note that the permit currently requires the permittee to measure baghouse pressure drop every five minutes (FGEAST SC VI.14), monitor combustion temperature every five minutes (FGEAST SC VI.15), and record

air flow at least once daily (FGEAST SC VI.16). For the purpose of defining an excursion, we recommend using the specified frequencies to define the averaging period associated with each level.

AQD Response No. 4:

For FGEAST SC VI.21, added “5-minute block average” for the pressure drop across the baghouse, “5-minute block average” for the minimum combustion temperature, and “daily block average” for air flow through waste treatment process building to define the averaging periods for an excursion.

EPA Comment No. 5:

We request that you verify the in-permit references to monitoring for the VOC, HAP, and particulate limits included in FGWEST Section I. In particular, the VOC and HAP limits reference FGWEST SC VI.5 for monitoring, but the monitoring in SC VI.5 applies to particulates. On the other hand, the particulate limits do not reference SC VI.5. Specific conditions are included below.

- a. VOC limits : FGWEST SC I.1, I.2, I.3 – I.8.
- b. Particulate limits: FGWEST SC I.10 – 1.12.

AQD Response No. 5:

Corrected the in-permit references for FGWEST SC I.1 – I.9 by deleting the reference to SC VI.5 which applies to particulates. For FGWEST SC I.2, added the in-permit reference to SC VI.7 which is what should have been referenced instead of SC VI.5. For the particulate limits in FGWEST SC I.10 – 1.12, added SC VI.5 for particulate monitoring and records. Deleted SC VI. 6 which was a numbering error resulting in referencing VOC recordkeeping.

Also, corrected FGEAST SC I.14 and I.15 in-permit references. For SC I.14, the reference pointing to SC VI.9 should be SC VI.10. For SC I.15, the reference pointing to SC VI.10 should be SC VI.11.

EPA Comment No. 6:

FGWEST SC VI.12 allows the permittee to change the frequency of observations with the written approval of the AQD District Supervisor. As written, it is unclear which changes the permittee is allowed to make to the monitoring frequency without requiring a significant modification to the ROP. Particularly, 40 CFR 70.7(e)(4) specifies that a significant modification if a permit modification does not qualify as a minor permit modification or an administrative amendment. 40 CFR 70.7(e)(2)(i)(A)(2) specifies revisions to monitoring may only be considered a minor permit modification if there are no significant changes to monitoring. Significant changes to monitoring includes, but is not limited to, reducing the frequency of required monitoring. As written, it appears that the permittee may request less frequent monitoring and be granted approval to do so without modifying the ROP. In order to ensure that changes to monitoring allowed by FGWEST SC VI.12 would not also require a significant modification to the ROP, we request that EGLE specify what kind of changes to the frequency are allowed and revise FGWEST SC VI.12 as necessary to ensure a significant change to monitoring would not occur.

AQD Response No. 6:

Added a special condition per Rule 213(3) that the permittee may only increase the frequency of visible emission observations required in SC VI.12 so that a significant modification of the ROP will not be required. The permittee shall keep, in a satisfactory manner, a log of all visible emission observations (described in Appendix 3-1) of the silo baghouse exhausts including the time, duration, and a description of any increases in monitoring frequency and the reason for the changes. The permittee shall keep all records on file and make them available to the Department upon request. This special condition was numbered SC VI.13 and the subsequent conditions renumbered.

Also, FGEAST SC VI.13 allows the permittee to change the frequency of observations with the written approval of the AQD District Supervisor. This was corrected by adding a special condition per Rule 213(3) that the permittee may only increase the frequency of visible emission observations required in SC VI.13. The permittee shall keep, in a satisfactory manner, a log of all visible emission observations (described in Appendix 3-1) of the silo baghouse exhausts including the time, duration, and a description of any

increases in monitoring frequency and the reason for the changes. The permittee shall keep all records on file and make them available to the Department upon request. This special condition was numbered SC VI.14 and the subsequent conditions renumbered.

EPA Comment No. 7:

The draft ROP incorporates several requirements which cite 40 CFR Part 61, Subpart FF as the underlying applicable authority. However, it is unclear from the permit which specified requirements from Subpart FF are being incorporated or used to establish the authority for each permit condition. 40 CFR 70.6(a)(1)(i) requires, in relevant part, for Part 70 permits to specify and reference the origin of and authority for each term or condition in the permit. In order to clearly identify the authority for each condition, we request that you evaluate the following permit conditions to determine which Subpart FF requirement applies and, as necessary, revise the citation to origin and authority to specifically identify the underlying applicable requirement.

a. FGLIQWASTETKS SC II.2, VI.7

AQD Response No. 7:

The UAR for Subpart FF of 40 CFR 61.342 Standards: General was added to the global citation for Subpart FF in applicable special conditions for FGLIQWASTETKS SC II.2 and VI.7.

Also, the UAR for Subpart FF of 40 CFR 61.342 Standards: General was added to the global citation for Subpart FF in applicable special conditions for FGWEST SC III.3 and VI.11.

EPA Comment No. 8:

FGLIQWASTETKS SC VI.8 and VI.9 cite 40 CFR 60.115(c) and 60.116(b), respectively, as the underlying requirement. However, the citation to origin and authority should instead refer to 40 CFR 60.115b(c) and 60.116b(b). We request that you correct the citation to origin and authority.

AQD Response No. 8:

The citation in FGLIQWASTETKS SC VI.8 and VI.9 has been corrected to 40 CFR 60.115b(c) and 60.116b(b), respectively.

EPA Comment No. 9:

FGTMTFACILITY SC III.2 requires the permittee to develop and submit a written startup, shutdown, and malfunction plan pursuant to MACT DD. However, SSM plans are no longer required by MACT DD since those provisions have been removed in more recent rulemakings. In particular, 80 FR 14248, Section IV.C, FR page 14260, explains that SSM exemptions are no longer allowed under MACT DD (see <https://www.federalregister.gov/documents/2015/03/18/2015-05463/national-emission-standards-for-hazardous-air-pollutants-off-site-waste-and-recovery-operations>). To ensure consistency with MACT DD, we request that you remove the SSM plan requirement.

AQD Response No. 9:

FGTMTFACILITY SC III.2 with the startup, shutdown, and malfunction (SSM) plan requirement has been removed.

EPA Comment No. 10:

FGTMTFACILITY SC IV.1 and IV.2 requires the flexible group to generally meet applicable requirements within MACT DD and 40 CFR Part 61, Subpart FF, respectively. However, it is unclear which specific requirements the permittee must meet within each standard for emissions units included in the flexible group. 40 CFR 70.6(a)(1) requires the permit to incorporate emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. While these requirements are incorporated into the permit generally, the lack of specificity makes it difficult to identify the applicable emission limitations and to evaluate whether the source is meeting those requirements. To ensure that all applicable requirements are incorporated into the permit, we request that you identify which specific requirements within MACT DD and 40 CFR Part 61,

Subpart FF apply and, as necessary, revise the citation to origin and authority to more specifically identify the applicable requirements within the permit.

AQD Response No. 10:

The specific citations applicable to the source for MACT DD have been added as UARs to FGTMTFACILITY SC IV.1. The specific citations applicable to the source for Subpart FF have been added as UARs to FGTMTFACILITY SC IV.2.

EPA Comment No. 11:

FGTMTFACILITY SC V.1 and V.2 require the permittee to conduct applicable testing as required in 40 CFR 63.694 and 40 CFR 61.355, respectively. Although incorporated into the permit, we note that the testing requirement referenced in each permit condition specifies different testing requirements. To ensure that the permit incorporates applicable testing requirements and to better ensure permit clarity, we request that you revise the citation to origin and authority to specifically identify which testing the permittee must perform within MACT DD and Part 61, Subpart FF, respectively.

AQD Response No. 11:

The specific citations to conduct applicable testing as required in 40 CFR 63.694 and 40 CFR 61.355 have been added to FGTMTFACILITY SC V.1 and V.2, respectively.

EPA Comment No. 12:

FGMACTDD SC IV.1(a)(i) allows the permittee to use a closed vent system with no detectable organic emissions using the procedure in 40 CFR 63.694(k). It is unclear from the permit record whether the permittee operates this kind of closed vent system. We request that you verify whether the permittee operates a closed vent system with no detectable organic emissions. If you determine that the permittee does operate this kind of closed vent system, then we request that you incorporate applicable procedures specified in 40 CFR 63.694(k) and applicable monitoring requirements specified at 40 CFR 63.695(c)(1).

AQD Response No. 12:

The permittee operates a closed vent system that is designed to operate at a pressure below atmospheric pressure as allowed in FGMACTDD SC IV.1.a.ii which complies with 40 CFR 63.693(c)(1)(ii). Negative pressure is maintained in the East Bay (FGEAST) treatment building by operating the air system between 19,500 and 26,400 cubic foot per minute (cfm). The closed vent system has a pressure gauge at the baghouse. The readings are readily accessible from the control room. Baghouse pressure is maintained between 1.5 and 8 inches of water column which is below atmospheric pressure.

EPA Comment No. 13:

FGMACTDD SC VII.4(b) incorporates applicable reporting requirements specified at 40 CFR 63.697. However, the requirement to submit a Notification of Performance Test at 40 CFR 63.697(b)(1) is not included in the permit. We request that you evaluate whether 40 CFR 63.697(b)(1) should be included in the permit. We note that FGMACTDD SC V.4 requires the permittee to submit a testing notification at least 30 days ahead of testing, but the underlying applicable requirement for SC V.4 only refers to R 336.1213(3). If SC V.4 is intended to meet the requirement of 40 CFR 63.697(b)(1), then we recommend that you revise the citation to origin and authority to also reference 40 CFR 63.697(b)(1).

AQD Response No. 13:

The specific citation to submit a Notification of Performance Test per 40 CFR 63.697(b)(1) was added to FGMACTDD SC V.4.

## **Changes to the September 11, 2023 Draft ROP**

The following changes were made to the draft ROP.

### **FGEAST:**

- SC I.14 - Corrected the "Monitoring/Testing Method" column to point to SCs V.4, VI.10, and VI.12.
- SC I.15 - Corrected the "Monitoring/Testing Method" column to point to SCs V.4 and VI.11.
- SC III.1 - Added the UAR of 40 CFR 63.685(i)(1).
- SC IV.1 - Added the UARs of 40 CFR 63.685(i)(2) and 40 CFR 63.693(f)(1)(i).
- SC IV.2 - Added the UAR of 40 CFR 63.685(i)(1).
- SC IV.3 - Added the UAR of 40 CFR 63.693(f)(1)(i).
- SC IV.4 - Added the UAR of 40 CFR 63.693(f)(1)(i).
- SC IV.5 - Added the UAR of 40 CFR 63.685(i)(1).
- SC IV.7 - Added the UAR of 40 CFR 63.685(i)(1).
- SC V.1 - Added the UAR of 40 CFR 63.694(l).
- SC V.2 - Added the UAR of 40 CFR 63.685(i)(1).
- SC V.3 - Added to the "Test Method Reference" column, the VOC capture test method of 40 CFR 52.741, Appendix B, Procedure T.
- SC VI.1 - Added the UARs of 40 CFR 63.693(f)(3) and 40 CFR 63.695(e).
- SC VI.2 - Added the UARs of 40 CFR 63.695(e), 40 CFR 63.696(g), and 40 CFR 63.696(h).
- SC VI.4 - Deleted the UAR of 40 CFR Part 63, Subparts A and DD as not applicable.
- SC VI.14 - Added a special condition that the permittee may only increase the frequency of visible emission observations required in SC VI.13 and that a log of all visible emission observations shall be kept in a satisfactory manner. Renumbered special conditions below SC VI.14.
- SC VI.22 - Added for excursions that the pressure drop shall be based on a 5-minute block average for the baghouse, a minimum combustion temperature shall be based on a 5-minute block average for the RTO, or a departure from the indicator range specified for the air flow through the FGEAST shall be based on a daily block average.

### **FGWEST:**

- SC I.1 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1, VI.6, and VI.8.
- SC I.2 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1, VI.6, VI.7 and VI.8.
- SC I.3 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1 and VI.6.
- SC I.5 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1 and VI.6.
- SC I.6 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1 and VI.6.
- SC I.7 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1 and VI.6.
- SC I.8 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1 and VI.6.
- SC I.9 - Corrected the "Monitoring/Testing Method" column to point to SCs V.1 and VI.6.
- SC I.10 - Corrected the "Monitoring/Testing Method" column to point to SCs V.3, V.4, VI.1, VI.2, VI.4, VI.5.
- SC I.11 - Corrected the "Monitoring/Testing Method" column to point to SCs V.3, V.4, VI.1, VI.2, VI.4, VI.5.
- SC I.12 - Corrected the "Monitoring/Testing Method" column to point to SCs V.3, V.4, VI.1, VI.2, VI.4, VI.5.
- SC II.4 - Added the UAR of 40 CFR 63.683(b)(1)(iii).
- SC III.5 - Added the UAR of 40 CFR 61.342.
- SC VI.9 - Added the UAR of 40 CFR 63.696(a).
- SC VI.10 - Added the UAR of 40 CFR 63.696(a).
- SC VI.11 - Added the UAR of 40 CFR 61.342.
- SC VI.13 - Added a special condition that the permittee may only increase the frequency of visible emission observations required in SC VI.12 and that a log of all visible emission observations shall be kept in a satisfactory manner. Renumbered special conditions below SC VI.13.

### **FGLIQWASTETKS:**

- SC II.1 - Added the UAR of 40 CFR 63.683(b)(1)(iii).
- SC II.2 - Added the UAR of 40 CFR 61.342.

SC VI.5 - Added the UAR of 40 CFR 63.696(a).  
SC VI.6 - Added the UAR of 40 CFR 63.696(a).  
SC VI.7 - Added the UAR of 40 CFR 61.342.  
SC VI.8 - Corrected the UAR to 40 CFR 60.115b(c).  
SC VI.9 - Corrected the UAR to 40 CFR 60.116b(b).

FGTMTFACILITY:

SC III.2 - Deleted the SSM plan requirement.  
SC IV.1 - Added the UARs of 40 CFR 63.683, 40 CFR 63.685, 40 CFR 63.688, and 40 CFR 63.693.  
SC IV.2 - Added the UARs of 40 CFR 61.342, 40 CFR 61.343, and 40 CFR 61.349.  
SC V.1 - Added the UAR of 40 CFR 63.694(b).  
SC V.2 - Added the UAR of 40 CFR 61.355(b)(3).  
SC VI.4 - Added the UAR of 40 CFR 63.695.  
SC VI.5 - Added the UAR of 40 CFR 63.696.  
SC VI.6 - Added the UAR of 40 CFR 61.354.  
SC VI.7 - Added the UAR of 40 CFR 61.356.  
SC VII.4 - Added the UARs of 40 CFR 61.357 and 40 CFR 63.697.

FGMACTDD:

SC V.4 - Added the UAR of 40 CFR 63.697(b)(1) which is the specific citation to submit a Notification of Performance Test per MACT DD.