

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

EFFECTIVE DATE: June 15, 2023
REVISION DATE: December 15, 2023

ISSUED TO

The Andersons Marathon Holdings, LLC

State Registration Number (SRN): B8570

LOCATED AT

26250 B Drive North, Sheridan Township, Calhoun County, Michigan 49224

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B8570-2023a

Expiration Date: June 15, 2028

Administratively Complete ROP Renewal Application Due Between
December 15, 2026 and December 15, 2027

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee's authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B8570-2023a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

Monica Brothers, Kalamazoo District Supervisor

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AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

A. GENERAL CONDITIONS

Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).² **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"² **(R 336.1301(1))**
 - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
 - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(R 336.1901(b))**

Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).² **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
 - a. The date, location, time, and method of sampling or measurements.
 - b. The dates the analyses of the samples were performed.
 - c. The company or entity that performed the analyses of the samples.
 - d. The analytical techniques or methods used.
 - e. The results of the analyses.
 - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
 - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.² **(R 336.1912)**

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
 - a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**

- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
 - a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c). **(40 CFR Part 68)**

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² **(R 336.1201(4))**

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

B. SOURCE-WIDE CONDITIONS

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

SOURCE-WIDE CONDITIONS

DESCRIPTION

All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment. (PTI 3-21)

POLLUTION CONTROL EQUIPMENT

Baghouses C-20, C-30, C-30A-1, C-30A-2, C-30A-3, C-30A-4, C-70A, P-70, and P-90; Scrubbers C-40, C-40A, and C-120; Flares P-50, P-50A, and P-60; Thermal Oxidizer C-10 and Regenerative Thermal Oxidizer C-10A; and internal floating roofs

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	249 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.6	R 336.1205(1)
2. VOC	199 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.2	R 336.1205(1)
3. CO	222 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.2	R 336.1205(1)
4. Hazardous Air Pollutants (HAPs)	less than 10 tpy of any individual HAP ²	12-month rolling time period**	SOURCE-WIDE	SC VI.3	R 336.1205(1)
5. HAPs	less than 25 tpy of aggregate of HAPs ²	12-month rolling time period**	SOURCE-WIDE	SC VI.3	R 336.1205(1)
6. PM	90 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.2	R 336.1205(1)
7. PM10	65 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.2	R 336.1205(1)
8. PM2.5	60 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.2	R 336.1205(1)
9. SO ₂	78 tpy* ²	12-month rolling time period**	SOURCE-WIDE	SC VI.2	R 336.1205(1)

* Excluding fugitive emissions.

** 12-month rolling time period as determined at the end of each calendar month.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total ethanol and denaturant throughput	161 million gallons per year ²	12-month rolling time period*	SOURCE-WIDE	SC VI.5	R 336.1205(1), R 336.1225, R 336.1702(a)
2. Denaturant throughput	8.5 million gallons per year ²	12-month rolling time period*	SOURCE-WIDE	SC VI.5	R 336.1205(1), R 336.1225, R 336.1702(a)

* 12-month rolling time period as determined at the end of each calendar month.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall submit a malfunction abatement plan (MAP) for SOURCE-WIDE to the AQD District Supervisor. The interim MAP and any future revised MAP shall be subject to review and approval, as provided in Rule 911. The permittee shall not operate any equipment in SOURCE-WIDE unless the MAP, revised as necessary according to the procedures of Rule 911, is implemented and maintained. The MAP shall include procedures for maintaining and operating equipment in a satisfactory manner, including procedures for minimizing emissions during malfunction events, and a program for corrective action for such events. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs.² **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**
 - a. The permittee shall submit an interim MAP to the AQD District Supervisor before beginning operation of any equipment in SOURCE-WIDE.
 - b. No later than 270 days after commencing operation of any equipment in SOURCE-WIDE, the permittee shall revise the MAP, based on equipment operating history and the results of the emission testing, and submit the revised MAP to the AQD District Supervisor.
2. The permittee shall submit an odor management plan (OMP) for SOURCE-WIDE to the AQD District Supervisor. The OMP shall include procedures for maintaining and operating equipment in a manner that minimizes the release of odors to the outside air, and a program for corrective action for such events. If the OMP fails to address or inadequately addresses an event that results in an odor release to the outside air at the time the plan is initially developed, the owner or operator shall revise the OMP within 45 days after such an event occurs.¹ **(R 336.1901)**
 - a. The permittee shall submit an interim OMP to the AQD District Supervisor before beginning operation of any equipment in SOURCE-WIDE.¹ **(R 336.1901)**
 - b. No later than 270 days after commencing operation of any equipment in SOURCE-WIDE, the permittee shall revise the OMP based on equipment operating history and submit the revised OMP to the AQD District Supervisor.¹ **(R 336.1901)**
3. The permittee shall not operate SOURCE-WIDE unless an emergency response plan, to be followed in the event of an emergency, has been submitted to the local fire department or county emergency response agency and is implemented and maintained. By October 1 each year, the permittee shall review this plan with the local fire department or emergency response agency and make any necessary updates.¹ **(R 336.1901)**
4. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and DD, as they apply to SOURCE-WIDE.² **(40 CFR Part 60, Subparts A and DD)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. A sign shall be present and conspicuously placed at the facility entrance stating the emergency phone numbers for the owner, primary operator, local and state police, local fire department, and ambulance service.¹ **(R 336.1901)**
2. The permittee shall install and maintain fencing, warning signs, and/or other measures as necessary to attempt to prevent unauthorized individuals from entering the plant property and buildings.¹ **(R 336.1225, R 336.1901)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205(1), 40 CFR 52.21(c) and (d))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period VOC, CO, PM, PM10, PM2.5, and SO₂ emission calculations to demonstrate compliance with the limits in SC I.2, I.3, I.6, I.7, I.8, and I.9, respectively. These calculations shall be based upon emission test results, continuous emission monitor data, ethanol production rate records, hours of operation records, and fuel usage records. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1))**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period individual HAP and total HAP emission calculations to demonstrate compliance with the limits in SC I.4 and I.5. These calculations shall be based upon emission test results, continuous emission monitor data, ethanol production rate records, hours of operation records, and fuel usage records. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1))**
4. The permittee shall keep, in a satisfactory manner, records of the monthly and 12-month rolling time period, as determined at the end of each calendar month, denaturant and combined ethanol and denaturant throughput for SOURCE-WIDE. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, R 336.1702(a))**
5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NO_x emission calculations to demonstrate compliance with the limit in SC I.1. These calculations shall be based upon emission test results for FGOXID2 and FGCHP; continuous emission monitor data for FGOXID; continuous emission monitor data for FGCHP, if available; continuous parameter monitor data for FGCHP, if available; fuel use records for FGOXID2, FGCHP, EU-CT, EU-DB, and EU-DB in fresh air firing mode; ethanol production records; hours of operation records for EU-DIESELPUMP and EU-DIESELPUMP2; and hours of operation records for FGCHP when operating at temperatures less than 0°F and shall include appropriate data for equipment covered by other permits, grandfathered equipment and exempt equipment. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall provide written notification of construction and operation for SOURCE-WIDE to comply with the federal NSPS, 40 CFR 60.7. This notification shall be submitted to the AQD District Supervisor within the time frames specified in 40 CFR 60.7.² **(40 CFR 60.7)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-GRAINRECEIVE	Grain receiving - two truck unloading enclosures, each with a capacity of 15,000 bushel/hr, each with one receiving pit located at the grain elevator. The operation is controlled by baghouse C-201. (PTI 119-19C)	10-01-1981 / 10-22-2019	NA
EU-INTERNALOP	Internal operations - storage and internal handling of grain at grain elevator. (PTI 144-15G)	10-01-1981 / 02-16-2011 / 02-22-2021	NA
EU-GRAINDRY	One 62.1 MMBTU/hr (average) natural gas fired grain dryer (10,000 bushels/hr throughput capacity at 5 points moisture removal), at the grain elevator. (PTI 144-15G)	04-09-2015	NA
EU-GRAINSTORED	Four concrete storage silos (total of 490,000 bushels), three dry grain metal storage bins (total of 1.07 million bushels), two wet grain metal storage bins (total of 50,000 bushels), and two covered temporary storage enclosures (950,000 bushels and 1,100,000 bushels) at the grain elevator. (PTI 120-05G)	10-01-1981	NA
EU-TRUCKPIT	Corn receiving truck pit, controlled by baghouse C-20. (PTI 119-19C)	08-01-2006, 02-16-2011	FGC-20 FGCAMUNITS
EU-REDIRECTCONV	A screw conveyer to redirect grain collected by the Corn Receiving Baghouse, C-20, to the downstream liquid process units. This process occurs when the upstream grain receiving, and handling operations are offline. This conveyer is enclosed. (PTI 119-19C)	10-22-2019	FGENCLOSEDCONV
EU-BINEMPTCONV1	Formerly EU-BINEMPTCONV. Bin emptying conveyor #1. This conveyor is below grade and completely enclosed. (PTI 119-19C)	08-01-2006	FGENCLOSEDCONV
EU-BINEMPTCONV2	Bin emptying conveyor #2. This conveyor is below grade and completely enclosed. (PTI 119-19C)	08-01-2006	FGENCLOSEDCONV

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-RECEIVINGCONV	Corn receiving conveyor. This conveyor is below grade and completely enclosed. (PTI 119-19C)	08-01-2006 / 02-16-2011 / 10-22-2019	FGENCLOSEDCONV
EU-CORNELEV1	Corn elevator #1, controlled by baghouse C-20. (PTI 119-19C)	08-01-2006	FGC-20 FGCAMUNITS
EU-CORNELEV2	Corn elevator #2. This conveyor is enclosed, with the exception of exhaust to baghouse C-20. (PTI 119-19C)	08-01-2006 / 10-19-2019	FGC-20 FGCAMUNITS
EU-SCALPER1	Formerly EU-SCREEN. Corn scalper #1, controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS
EU-SCALPER2	Corn scalper #2, controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS
EU-TRANSCONV1	Corn transfer conveyor #1 for transfer of corn from Corn Scalper #2 to Corn Transfer Conveyor #2. This conveyor is enclosed. (PTI 119-19C)	12-16-2015	FGENCLOSEDCONV
EU-TRANSCONV2	Corn transfer conveyor #2 for transfer of corn from Corn Transfer Conveyor #1 to Day Bin #3. This conveyor is enclosed. (119-19C)	12-16-2015	FGENCLOSEDCONV
EU-CORNBIN1	Corn bin #1 (PTI 119-19C)	08-01-2006 / 07-20-2020 / 02-03-2021	FGCORNBINS
EU-CORNBIN2	Corn bin #2 (PTI 119-19C)	08-01-2006 / 07-20-2020 / 02-03-2021	FGCORNBINS
EU-DAYBIN1	Formerly EU-DAYBIN. Corn Surge/Day Bin #1. This bin is controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS
EU-DAYBIN2	Corn Surge/Day Bin #2. This bin is controlled by baghouse C-30. (PTI 119-19C)	08-02-2006	FGC-30 FGCAMUNITS
EU-DAYBIN3	Corn Surge/Day Bin #3. This bin is completely enclosed. (PTI 119-19C)	12-17-2015	NA
EU-MILL1	Hammermill #1, controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS
EU-MILL2	Hammermill #2, controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS
EU-MILL3	Hammermill #3, controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS
EU-MILL4	Hammermill #4, controlled by baghouse C-30. (PTI 119-19C)	10-11-2010	FGC-30 FGCAMUNITS
EU-MILL5	Hammermill 5, controlled by baghouse C-30A-1. (PTI 144-15C)	12-16-2015	FGMILL2 FGCAMUNITS
EU-MILL6	Hammermill 6, controlled by baghouse C-30A-2. (PTI 144-15C)	12-16-2015	FGMILL2 FGCAMUNITS
EU-MILL7	Hammermill 7, controlled by baghouse C-30A-3. (PTI 144-15C)	12-16-2015	FGMILL2 FGCAMUNITS
EU-MILL8	Hammermill 8, controlled by baghouse C-30A-4. (PTI 144-15C)	12-16-2015	FGMILL2 FGCAMUNITS
EU-FEED	Flour conveyor, controlled by baghouse C-30. (PTI 119-19C)	08-01-2006	FGC-30 FGCAMUNITS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-FERMENTER1	Fermenter #1, controlled by fermentation scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	08-01-2006	FGNSPSVV FGPURGE FGFERM FGCAMUNITS
EU-FERMENTER2	Fermenter #2, controlled by fermentation scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	08-01-2006	FGNSPSVV FGPURGE FGFERM FGCAMUNITS
EU-FERMENTER3	Fermenter #3, controlled by fermentation scrubber C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubber C-40 and C-40A. (PTI 144-15G)	02-16-2011	FGNSPSVV FGPURGE FGFERM FGCAMUNITS
EU-FERMENTER4	Fermenter #4, controlled by fermentation scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	12-16-2015	FGNSPSVVa FGPURGE FGFERM FGCAMUNITS
EU-FERMENTER5	Fermenter #5, controlled by fermentation scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	12-16-2015	FGNSPSVVa FGPURGE FGFERM FGCAMUNITS
EU-FERMENTER6	Fermenter #6, controlled by fermentation Scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	08-01-2006	FGFERM FGPURGE FGNSPSVV FGCAMUNITS
EU-FERMENTER7	Fermenter #7, controlled by fermentation Scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	08-01-2006	FGFERM FGPURGE FGNSPSVV FGCAMUNITS
EU-FERMENTER8	Fermenter #8, controlled by fermentation Scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 andC-40A. (PTI 144-15G)	12-16-2015	FGFERM FGPURGE FGNSPSVVa FGCAMUNITS
EU-FERMENTER9	Fermenter #9, controlled by fermentation Scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	12-16-2015	FGFERM FGPURGE FGNSPSVVa FGCAMUNITS
EU-FERMENTER10	Fermenter #10, controlled by fermentation Scrubbers C-40 and C-40A and purge scrubber C-120. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	12-16-2015	FGFERM FGPURGE FGNSPSVVa FGCAMUNITS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-BEERWELL	Beer well, controlled by fermentation scrubbers C-40 and C-40A. There is a pre-condenser before scrubbers C-40 and C-40A. (PTI 144-15G)	08-01-2006	FGNSPSVV FGFERM FGCAMUNITS
EU-YEASTTANK	Yeast tank, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-YEASTTANK2	Yeast tank, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-DRYER1	Dried distillers grains with solubles (DDGS) dryer #1, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006 / 02-16-2011	FGOXID FGCAMUNITS
EU-DRYER2	DDGS dryer #2, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006 / 02-16-2011	FGOXID FGCAMUNITS
EU-DRYER3	DDGS dryer #3, controlled by regenerative thermal oxidizer C-10A (PTI 144-15C)	12-16-2015	FGOXID2 FGCAMUNITS
EU-DRYER4	DDGS dryer #4, controlled by regenerative thermal oxidizer C-10A (PTI 144-15C)	12-16-2015	FGOXID2 FGCAMUNITS
EU-190PROOFCOND	190 proof condenser, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-200PROOFCOND	200 proof condenser, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-190PROOFCOND2	190 proof condenser #2, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-BEERCOLUMN	Beer column #1, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-BEERCOLUMN2	Beer column #2, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-CENTRIFUGE1	Centrifuge #1, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-CENTRIFUGE2	Centrifuge #2, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-CENTRIFUGE3	Centrifuge #3, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-CENTRIFUGE4	Centrifuge #4, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-CENTRIFUGE5	Centrifuge #5, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-CENTRIFUGE6	Centrifuge #6, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-CENTRIFUGE7	Centrifuge #7, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-CENTRIFUGE8	Centrifuge #8, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-RECTIFIER	Rectifier column #1, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-RECTIFIER2	Rectifier column #2, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-SIDESTRIPPER	Side stripper #1, controlled by thermal oxidizer C-10. (PTI 144-15E)	08-01-2006	FGOXID FGNSPSVV FGCAMUNITS
EU-SIDESTRIPPER2	Side Stripper #2, controlled by regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGNSPSVVa FGCAMUNITS
EU-TO&WHRB	Thermal oxidizer and waste heat recovery boiler. (PTI 144-15E)	08-01-2006 / 02-16-2011	FGOXID FGCAMUNITS
EU-RTO2	Regenerative thermal oxidizer C-10A. (PTI 144-15C)	12-16-2015	FGOXID2 FGCAMUNITS
EU-LOADOUTTRK	Denatured ethanol truck load-out, controlled by flare P-50. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGLOADOUT
EU-LOADOUTRL	Denatured ethanol rail load-out, controlled by flare P-50. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGLOADOUT
EU-LOADOUTTRK2	Dual-arm denatured ethanol truck load-out #2, controlled by flare P-50A. (PTI 144-15C)	07-22-2015 / 12-16-2015	FGLOADOUT
EU-COOLINGDRUM	Cooling Drum, controlled by baghouse C-70A. (PTI 144-15C)	12-16-2015	FGCAMUNITS
EU-DDGSLOADOUT	The DDGS truck and rail load-out - conveyors and elevators used for transfer and loading operations, controlled by baghouse P-90 and P-91. The DDGS storage is in an enclosed building and not connected to the baghouses. (PTI 144-15C)	08-01-2006 / 07-28-2014	NA
EU-190PROOF	165,000 gallon, 190 proof ethanol storage tank with an internal floating roof. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGNSPSTANKS
EU-200PROOF	165,000 gallon, 200 proof ethanol storage tank with an internal floating roof. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGNSPSTANKS
EU-DENATURANT	165,000 gallon gasoline denaturant storage tank with an internal floating roof. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGNSPSTANKS
EU-DENATTANK1	750,000 gallon denatured alcohol storage tank #1 with an internal floating roof. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGNSPSTANKS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-DENATTANK2	750,000 gallon denatured alcohol storage tank #2 with an internal floating roof. (PTI 144-15C)	08-01-2006 / 02-16-2011	FGNSPSTANKS
EU-DENATTANK3	1,500,000-gallon denatured ethanol storage tank with a cathodic protection system and an internal floating roof. (PTI 144-15C)	12-16-2015	FGNSPSTANKS
EU-ADDITIVES	3,000 gallon fixed roof additives storage tank. (PTI 120-05H)	08-01-2006	NA
EU-COOLINGTWR	4 cell cooling tower equipped with drift eliminators. (PTI 120-05H)	08-01-2006	NA
EU-COOLINGTWR2	4 cell cooling tower equipped with drift eliminators. (PTI 144-15C)	12-16-2015	NA
EU-CT	Combustion turbine equipped with dry low NOx (SoLoNOx) burner technology to generate electrical power. (PTI 144-15G)	12-16-2015	FGCHP
EU-DB	Duct burner associated with the combustion turbine. (PTI 144-15G)	12-16-2015	FGCHP
EU-DIESELPUMP	300 HP diesel fired emergency fire water pump. (PTI 120-05H)	08-01-2006	FGFIREPUMPS
EU-DIESELPUMP2	332-HP diesel fired emergency fire water pump. This pump was previously permitted under 144-15C (PTI 119-19C)	12-16-2015	NA
EU-WDGS	Wet distiller's grains & solubles (WDGS) handling operations. (PTI 120-05H)	08-01-2006	NA

**EU-GRAINRECEIVE
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Grain receiving - two truck unloading enclosures, each with a capacity of 15,000 bushel/hr, each with one receiving pit located at the grain elevator. The operation is controlled by baghouse C-201. (PTI 119-19C)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Baghouse C-201

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Visible Emissions	5 percent opacity ²	Six-minute average	EU-GRAINRECEIVE	SC VI.1	R 336.1205(1), R 336.1301, R 336.1901

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Grain Received	34 million bushels ²	12-month rolling time period as determined at the end of each calendar month	EU-GRAINRECEIVE	SC VI.3	R 336.1205(1), 40 CFR 52.21 (c) & (d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The applicant shall not operate EU-GRAINRECEIVE unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix 9 has been implemented and is maintained.² (R 336.1205(1), R 336.1901, R 336.1911)

See Appendix 9

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The applicant shall equip and maintain the open end of the truck unloading enclosure portions of EU-GRAINRECEIVE with a canvas barrier or other such device to close off as much as possible the open doorway while truck unloading occurs.² (R 336.1205(1), R 336.1301, R 336.1901, R 336.1910)
2. The permittee shall not operate the receiving pit portion of EU-GRAINRECEIVE unless the elevator baghouse C-201 is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the elevator baghouse C-201 includes maintaining it according to the malfunction abatement plant (MAP).² (R 336.1205(1), R 336.1331, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct a monthly one-minute visible emissions observation of the EU-GRAINRECEIVE vents during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² (R 336.1205(1), R 336.1301)
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EU-GRAINRECEIVE. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1205(1), R 336.1301)
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the bushels of grain received in EU-GRAINRECEIVE. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1205(1), 40 CFR 52.21(c) and (d))

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-201A	43 ²	65 ²	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-INTERNALOP
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Internal operations - storage and internal handling of grain at grain elevator. (PTI 144-15G)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Grain handled internally	55 million bushels ²	12-month rolling time period as determined at the end of each calendar month	EU-INTERNALOP	SC VI.1	R 336.1205(1), 40 CFR 52.21(c) and (d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The applicant shall not operate EU-INTERNALOP unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix 9 has been implemented and is maintained.² (R 336.1205(1), R 336.1901, R 336.1911)
2. Particulate matter collected from the cleaning operation portion of EU-INTERNALOP shall be removed and disposed of in a manner which minimizes fugitive emissions.² (R 336.1205(1), R 336.1370, R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the bushels of grain handled internally for EU-INTERNALOP. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1205(1), 40 CFR 52.21(c) and (d))

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-GRAINDRY
 EMISSION UNIT CONDITIONS**

DESCRIPTION

One 62.1 MMBTU/hr (average) natural gas fired grain dryer (10,000 bushels/hr throughput capacity at 5 points moisture removal), at the grain elevator. (PTI 144-15G)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Visible Emissions	5 percent opacity ²	Six-minute average	EU-GRAINDRY	SC VI.1	R 336.1205(1), R 336.1301, R 336.1901

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Natural gas	125 million cubic feet ²	12-month rolling time period as determined at the end of each calendar month	EU-GRAINDRY	SC VI.3	R 336.1205(1), 40 CFR 52.21(c) & (d)
2. Grain dried	10 million bushels ²	12-month rolling time period as determined at the end of each calendar month	EU-GRAINDRY	SC VI.4	R 336.1205(1), 40 CFR 52.21(c) & (d)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The applicant shall not operate any of the emission units in EU-GRAINDRY unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix 9 has been implemented and is maintained.² (R 336.1205(1), R 336.1901, R 336.1911)

See Appendix 9

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The applicant shall not operate EU-GRAINDRY unless all the exhaust gases are passed through column plate perforations with diameters less than or equal to 0.094 inch.² (R 336.1205(1), R 336.1301, R 336.1331, R 336.1901, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a monthly one-minute visible emissions observation of the EU-GRAINDRY vents during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² **(R 336.1205(1), R 336.1301)**
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EU-GRAINDRY. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1301)**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of cubic feet of natural gas burned in EU-GRAINDRY. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 52.21(c) and (d))**
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the bushels of grain dried in EU-GRAINDRY. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 52.21(c) and (d))**

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-DAYBIN3
EMISSION UNIT CONDITIONS**

DESCRIPTION

Corn Surge/Day Bin #3. This bin is completely enclosed. (PTI 119-19C)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-DAYBIN3 unless the bin is enclosed.² (R 336.1205(1), R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-COOLINGDRUM
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Cooling Drum, controlled by baghouse C-70A. (PTI 144-15C)

Flexible Group ID: FGCAMUNITS

POLLUTION CONTROL EQUIPMENT

Baghouse C-70A

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	2.14 pph ²	Hourly	EU-COOLINGDRUM	SC V.1, VI.1, VI.2, VI.3	40 CFR 52.21(c) & (d)
2. PM2.5	2.14 pph ²	Hourly	EU-COOLINGDRUM	SC V.1, VI.1, VI.2, VI.3	40 CFR 52.21 (d)
3. VOC	13.6 pph ²	Hourly	EU-COOLINGDRUM	SC V.1	R 336.1225, 336.1702(a)
4. Visible Emissions	5 percent opacity ²	Six-minute average	EU-COOLINGDRUM	SC VI.1, VI.2	R 336.1301

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-COOLINGDRUM unless baghouse C-70A is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of baghouse C-70A includes maintaining it according to the MAP.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall equip and maintain baghouse C-70A with a differential pressure monitoring device.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify PM10, PM 2.5, and VOC emission rates from EU-COOLINGDRUM by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall verify the verify PM10, PM 2.5, and VOC emission rates from EU-COOLINGDRUM at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a monthly visible emissions check of the EU-COOLINGDRUM vent during routine operating conditions. For the purpose of this condition, such checks do not have to be in accordance with Method 9. If a check reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions, as specified in the MAP.² **(R 336.1301)**
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EU-COOLINGDRUM. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1301)**
3. The permittee shall continuously monitor the differential pressure of baghouse C-70A and record a monthly reading as an indicator of proper operation of the dust collector.² **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-70A	36 ²	110 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-DDGSLOADOUT
 EMISSION UNIT CONDITIONS**

DESCRIPTION

The DDGS truck and rail load-out - conveyors and elevators used for transfer and loading operations, controlled by baghouses P-90 and P-91. The DDGS storage is in an enclosed building and not connected to the baghouses. (PTI 144-15C)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

DDGS Load-out Baghouses P-90 and P-91

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	0.13 pph ²	Hourly	EU-DDGSLOADOUT	SC V.1, VI.1, VI.2, VI.3	40 CFR 52.21(c) and (d)
2. PM2.5	0.13 pph ²	Hourly	EU-DDGSLOADOUT	SC V.1, VI.1, VI.2, VI.3	40 CFR 52.21(d)
3. Visible Emissions	5 percent opacity ²	Six-minute average	EU-DDGSLOADOUT	SC VI.1, VI.2	R 336.1205(1), R 336.1301

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not operate any equipment in EU-DDGSLOADOUT unless the DDGS load-out baghouses P-90 and P-91 are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the DDGS load-out baghouses P-90 and P-91 includes maintaining it according to the MAP.² **(R 336.1205(1), R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
- The permittee shall equip and maintain baghouses P-90 and P-91 with differential pressure monitoring devices.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from EU-DDGSLOADOUT by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a monthly one-minute visible emissions observation of the EU-DDGSLOADOUT vent during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² **(R 336.1205(1), R 336.1301)**
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EU-DDGSLOADOUT. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1301)**
3. The permittee shall continuously monitor the differential pressure of baghouses P-90 and P-91 and record a monthly reading as an indicator of proper operation of the dust collector. The monitor shall be calibrated once per year.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-90	14 ²	50 ²	40 CFR 52.21 (c) and (d)
2. S-91 ^a	36 x 60 ²	48 ²	40 CFR 52.21 (c) and (d)

^a This stack is not required to be discharged unobstructed vertically upwards to the ambient air.

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-COOLINGTWR EMISSION UNIT CONDITIONS

DESCRIPTION

4 cell cooling tower equipped with drift eliminators. (PTI 120-05H)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Drift Eliminators

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-COOLINGTWR unless it is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of EU-COOLINGTWR includes maintaining it according to the MAP.² (R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-COOLINGTWR2 EMISSION UNIT CONDITIONS

DESCRIPTION

4 cell cooling tower equipped with drift eliminators. (PTI 144-15C)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Drift Eliminators

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-COOLINGTWR2 unless it is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of EU-COOLINGTWR2 includes maintaining it according to the MAP.² (R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-COOLINGTOWER2 with drift eliminators.² (R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-DIESELPUMP
 EMISSION UNIT CONDITIONS**

DESCRIPTION

300 HP diesel fired emergency fire water pump. (PTI 120-05H)

Flexible Group ID: FGFIREPUMPS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	7.8 g/HP-hr ²	Hourly	EU-DIESELPUMP	SC V.1 or VI.2	40 CFR 60.4205(c)
2. CO	2.6 g/HP-hr ²	Hourly	EU-DIESELPUMP	SC V.1 or VI.2	40 CFR 60.4205(c)
3. PM	0.4 g/HP-hr ²	Hourly	EU-DIESELPUMP	SC V.1 or VI.2	40 CFR 60.4205(c)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel	Sulfur content shall not exceed 15 ppm ²	Instantaneous	EU-DIESELPUMP	SC VI.3	40 CFR 60.4207(b), 40 CFR 80.510(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU-DIESELPUMP for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205(1), R 336.1225, 40 CFR 52.21(c) & (d))**
- The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of EU-DIESELPUMP.² **(40 CFR 60.4206)**
- The permittee shall maintain and operate EU-DIESELPUMP per the manufacturer’s emission related written instructions.² **(40 CFR 60.4211(a)(1))**
- The permittee shall operate EU-DIESELPUMP according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for EU-DIESELPUMP to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (Other than the hours limitation in SC III.1) There is no time limit on the use of EU-DIESELPUMP in emergency situations.² **(40 CFR 60.4211(f), 40 CFR 60.4211(f)(1))**

5. The permittee may operate EU-DIESELPUMP for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).² **(40 CFR 60.4211(f)(2))**
 - a. EU-DIESELPUMP may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - b. EU-DIESELPUMP may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - c. EU-DIESELPUMP may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
6. The permittee may operate EU-DIESELPUMP for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.² **(40 CFR 60.4211(f)(3))**
 - a. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - i. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - ii. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - iii. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - iv. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - v. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install a non-resettable hour meter on EU-DIESELPUMP prior to startup of the engine.² **(40 CFR 60.4209(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify NMHC + NO_x, CO, and PM emission rates from EU-DIESELPUMP, by testing at owner's expense, in accordance with Department requirements or by providing manufacturer certification documentation as required in SC VI.2.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
NO _x	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

If testing is to be performed, the permittee must submit a complete stack-testing plan to the AQD. No less than 60 days prior to testing, the permittee must submit a complete stack-testing plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep in a satisfactory manner, records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation, non-emergency operation and demand response operation. The permittee shall keep all records on file and make them available to the department upon request.² **(R 336.1213(3), 40 CFR 60.4214(b))**
2. The permittee shall keep, in a satisfactory manner, a record of testing required in SC V.1 or manufacturer certification documentation indicating that EU-DIESELPUMP meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart IIII. The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.4211)**
3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EU-DIESELPUMP, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil.² **(40 CFR 60.4207(a), 40 CFR 80.510(b))**
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the hours of operation for EU-DIESELPUMP. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, 40 CFR 52.21(c) and (d))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-110*	3 ²	8 ²	40 CFR 52.21 (c) and (d)

* The exhaust gases from this stack are not required to be discharged unobstructed vertically upwards to the ambient air.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal National Emission Standards for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to the equipment in EU-DIESELPUMP.² **(40 CFR Part 63, Subparts A and ZZZZ)**
2. The permittee shall comply with all provisions of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to the equipment in EU-DIESELPUMP.² **(40 CFR Part 60, Subparts A and IIII)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU-DIESELPUMP2
 EMISSION UNIT CONDITIONS**

DESCRIPTION

332-HP diesel fired emergency fire water pump. This pump was previously permitted under PTI 144-15C. (PTI 119-19C)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	3.0 g/HP-hr ²	Hourly	EU-DIESELPUMP2	SC V.1, VI.2	40 CFR 60.4205(c)
2. PM	0.15 g/HP-hr ²	Hourly	EU-DIESELPUMP2	SC V.1, VI.2	40 CFR 60.4205(c)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Diesel Fuel	Sulfur content shall not exceed 15 ppm ²	Instantaneous	EU-DIESELPUMP2	SC VI.3	40 CFR 60.4207(b)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-DIESELPUMP2 for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205(1), R 336.1225, 40 CFR 52.21(c) & (d))**
2. The permittee shall operate and maintain EU-DIESELPUMP2 so that it achieves the emission standards as required in 40 CFR 60.4205 over the entire life of the engine.² **(40 CFR 60.4206)**
3. The permittee shall maintain and operate EU-DIESELPUMP2 per the manufacturer's emission related written instructions.² **(40 CFR 60.4211(a)(1))**
4. The permittee shall operate EU-DIESELPUMP2 according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for EU-DIESELPUMP2 to be considered an emergency stationary ICE under the subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for over 50 hours per year, as described in paragraphs 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. (Other than the hours limitation in SC III.1). There is no time limit on the use of EU-DIESELPUMP2 in emergency situations.² **(40 CFR 60.4211(f), 40 CFR 60.4211(f)(1))**

5. The permittee may operate EU-DIESELPUMP2 for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 60.4211(f)(3) of this section counts as part of the 100 hours per calendar year allowed.² **(40 CFR 60.4211(f)(2))**
 - a. EU-DIESELPUMP2 may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

6. The permittee may operate EU-DIESELPUMP2 for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in SC III.5. Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. As specified in 40 CFR 60.4211(f)(3)(i), the 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:² **(40 CFR 60.4211(f)(3))**
 - a. The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - b. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - c. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - d. The power is provided only to the facility itself or to support the local transmission and distribution system.
 - e. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install a non-resettable hour meter on EU-DIESELPUMP2 prior to startup of the engine.² **(40 CFR 60.4209(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify NMHC + NO_x and PM emission rates from EU-DIESELPUMP2, by testing at owner's expense, in accordance with Department requirements or by providing manufacturer certification documentation as required in SC VI.2. If testing is to be performed, the permittee must submit a complete stack-testing plan to the AQD. No less than 60 days prior to testing, the permittee must submit a complete stack-testing plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(R 336.2001, 40 CFR 52.21 (c) & (d), 40 CFR 60.4211)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep in a satisfactory manner, records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation, non-emergency operation and demand response operation. The permittee shall keep all records on file and make them available to the department upon request.² **(40 CFR 60.4214(b))**
2. The permittee shall keep, in a satisfactory manner, the following records for EU-DIESELPUMP2:
 - a. For a certified engine: The permittee shall keep records of the manufacturer certification documentation. The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.4211)**
3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for EU-DIESELPUMP2:
 - a. For a certified engine: The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.4. The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.4211)**
4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the hours of operation for EU-DIESELPUMP2. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-130	6.5 ²	9 ²	40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal National Emission Standards for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to the equipment in EU-DIESELPUMP2.² **(40 CFR Part 63, Subparts A and ZZZZ)**
2. The permittee shall comply with all provisions of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to the equipment in EU-DIESELPUMP2.² **(40 CFR Part 60, Subparts A and IIII)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

EU-WDGS EMISSION UNIT CONDITIONS

DESCRIPTION

Wet distiller's grains & solubles (WDGS) handling operations. (PTI 120-05H)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall limit Wet Distiller's Grains and Solubles (WDGS) storage capacity to not more than 160,000 cubic feet.¹ **(R 336.1901)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall record once per day, in a satisfactory manner, the volume of WDGS in storage. The permittee shall keep all records on file and make them available to the Department upon request.¹ **(R 336.1901)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCORNBINS	Corn storage operations. (PTI 119-19C)	EU CORNBIN1, EU-CORNBIN2
FGENCLOSEDCONV	Six corn transfer conveyors without emissions control equipment. These conveyors are enclosed. (PTI 119-19C)	EU-RECEIVINGCONV, EU-BINEMPTCONV1, EU-BINEMPTCONV2, EU-TRANSCONV1, EU-TRANSCONV2, EU-REDIRECTCONV
FGC-20	Corn receiving, storage, and handling operations. All equipment is controlled by baghouse C-20. (PTI 119-19C)	EU-TRUCKPIT, EU-CORNELEV1, EU-CORNELEV2
FGC-30	Corn scalping, storage, and milling operations. All equipment is controlled by baghouse C-30. (PTI 119-19C)	EU-SCALPER1, EU-SCALPER2, EU-DAYBIN1, EU-DAYBIN2, EU-MILL1, EU-MILL2, EU-MILL3, EU-MILL4, EU-FEED
FGMILL2	Corn milling. (PTI 144-15C)	EU-MILL5, EU-MILL6, EU-MILL7, EU-MILL8
FGFERM	<p>Exhaust from all fermenters and the beer well.</p> <p>While the neighboring CO2 recovery facility is not operating, the emissions from FGFERM are vented to the atmosphere through fermentation CO2 scrubbers C-40 and C-40A. Emission may vent through the pre-condenser before venting through scrubbers C-40 and C-40A.</p> <p>While the neighboring CO2 recovery facility is operating, most or all of the exhaust stream from fermentation CO2 scrubber C-40 is routed to the CO2 recovery facility and some of the exhaust stream from fermentation CO2 scrubber C-40A may be routed to the CO2 recovery facility.</p> <p>During fermenter filling, the emissions are routed through purge scrubber C-120 as described in FGPURGE. (PTI 144-15G)</p>	EU-BEERWELL, EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER6, EU-FERMENTER7, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10,

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGPURGE	<p>While the neighboring CO2 recovery facility is operating, the exhaust stream from fermentation CO2 scrubbers C-40 and/or C-40A may be routed to the CO2 recovery facility.</p> <p>Exhaust from a fermenter during the clean in place and initial filling is not suitable for use at the CO2 recovery facility; therefore, the emissions from the fermenter cleaning and filling may be controlled by purge scrubber C-120, which vents to atmosphere. Interlocks ensure that only one fermenter vents to the purge scrubber at a time. (PTI 144-15G)</p>	<p>EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER6, EU-FERMENTER7, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10,</p>
FGOXID	<p>All equipment venting to thermal oxidizer C-10. (PTI 144-15E)</p>	<p>EU-190PROOFCOND, EU-200PROOFCOND, EU-BEERCOLUMN, EU-CENTRIFUGE1, EU-CENTRIFUGE2, EU-CENTRIFUGE3, EU-CENTRIFUGE4, EU-DRYER1, EU-DRYER2, EU-RECTIFIER, EU-SIDESTRIPPER, EU-TO&WHRB, EU-YEASTTANK, EU-YEASTTANK2,</p>
FGOXID2	<p>All equipment venting to regenerative thermal oxidizer C-10A. (PTI 144-15C)</p>	<p>EU-190PROOFCOND2, EU-BEERCOLUMN2, EU-CENTRIFUGE5, EU-CENTRIFUGE6, EU-CENTRIFUGE7, EU-CENTRIFUGE8, EU-DRYER3, EU-DRYER4, EU-RECTIFIER2, EU-SIDESTRIPPER2, EU-RTO2</p>

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCAMUNITS	The equipment in this flexible group is subject to Compliance Assurance Monitoring, 40 CFR 64.6	EU-TRUCKPIT, EU-CORNELEV1, EU-CORNELEV2, EU-SCALPER1, EU-SCALPER2, EU-DAYBIN1, EU-DAYBIN2, EU-MILL1, EU-MILL2, EU-MILL3, EU-MILL4, EU-MILL5, EU-MILL6, EU-MILL7, EU-MILL8, EU-FEED, EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER6, EU-FERMENTER7, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10, EU-BEERWELL, EU-YEASTTANK, EU-YEASTTANK2, EU-DRYER1, EU-DRYER2, EU-DRYER3, EU-DRYER4, EU-190PROOFCOND, EU-200PROOFCOND, EU-190PROOFCOND2, EU-BEERCOLUMN, EU-BEERCOLUMN2, EU-CENTRIFUGE1, EU-CENTRIFUGE2, EU-CENTRIFUGE3, EU-CENTRIFUGE4, EU-CENTRIFUGE5, EU-CENTRIFUGE6, EU-CENTRIFUGE7, EU-CENTRIFUGE8, EU-RECTIFIER, EU-RECTIFIER2, EU-SIDESTRIPPER, EU-SIDESTRIPPER2, EU-TO&WHRB, EU-RTO2 EU-COOLINGDRUM
FGLOADOUT	Two denatured ethanol truck load-outs and one rail load-out. (PTI 144-15C)	EU-LOADOUTRL, EU-LOADOUTTRK, EU-LOADOUTTRK2

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGNSPSTANKS	Ethanol, denaturant, and denatured ethanol storage tanks. Emissions are controlled by internal floating roofs. (PTI 144-15C)	EU-190PROOF, EU-200PROOF, EU-DENATTANK1, EU-DENATTANK2, EU-DENATTANK3, EU-DENATURANT
FGCHP	Combined heat and power (CHP) system to generate electricity and steam for the facility. The CHP system consist of a combustion turbine and a duct burner with a heat recovery steam generator (HRSG) to generate steam from the heat provided by the turbine exhaust and/or the heat provided by the duct burner. The CHP system can operate in three modes: turbine only, turbine and duct burner, and duct burner only. (PTI 144-15G)	EU-CT, EU-DB
FGNSPSVV	All pumps, valves, and pressure relief devices in light/heavy liquid service; all valves and pressure relief devices in gas/vapor service; each sampling connection; and each open-ended valve or line and all associated closed vent systems and control devices that commenced operation after January 5, 1981, and on or before November 7, 2006.	EU-190PROOFCOND, EU-200PROOFCOND, EU-BEERCOLUMN, EU-BEERWELL, EU-CENTRIFUGE1, EU-CENTRIFUGE2, EU-CENTRIFUGE3, EU-CENTRIFUGE4, EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER6, EU-FERMENTER7, EU-RECTIFIER, EU-SIDESTRIPPER, EU-YEASTTANK, EU-YEASTTANK2
FGNSPSVVa	All pumps, valves, and pressure relief devices in light/heavy liquid service; all valves and pressure relief devices in gas/vapor service; each sampling connection; and each open ended valve or line and all associated closed vent systems and control devices for which construction, reconstruction, or modification commenced after November 7, 2006.	EU-190PROOFCOND2, EU-BEERCOLUMN2, EU-CENTRIFUGE5, EU-CENTRIFUGE6, EU-CENTRIFUGE7, EU-CENTRIFUGE8, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10, EU-RECTIFIER2, EU-SIDESTRIPPER2
FGFIREPUMPS	A 300 HP diesel fired emergency fire water pump installed in August 2006.	EU-DIESELPUMP

**FGCORNBINS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Corn storage operations. (PTI 119-19C)

Emission Units: EU-CORNBIN1, EU-CORNBIN2

POLLUTION CONTROL EQUIPMENT

Bin vent filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	0.011 pph ²	Hourly	Each emission unit in FGCORNBINS	SC VI.1, SC VI.2	40 CFR 52.21(c) and (d)
2. PM2.5	0.002 pph ²	Hourly	Each emission unit in FGCORNBINS	SC VI.1, SC VI.2	40 CFR 52.21(d)
3. Visible Emissions	5 percent opacity ²	Six Minute Average	Each emission unit in FGCORNBINS	SC VI.1, SC VI.2	R 336.1301

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not operate any emission unit in FGCORNBINS unless the respective bin vent filter is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the bin vent filters includes maintaining them according to the MAP.² **(R 336.1205(1), R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
- The permittee shall equip and maintain each bin vent filter in FGCORNBINS with a differential pressure monitoring device.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM 2.5 emission rates from FGCORNBINS by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules

and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a monthly one-minute visible emissions observation of each emission unit in FGCORNBINS during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² **(R 336.1205(1), R 336.1301)**
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGCORNBINS. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and whether repairs were needed. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1301)**
3. The permittee shall continuously monitor the differential pressure of each bin vent filter in FGCORNBINS during operation and record a monthly reading as an indicator of proper operation of the dust collector. The indicator range is 0.1 to 6.0 inches of water. An excursion is a departure from the indicator range. The monitor shall be calibrated once per year.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BINVENT1*	7.375 x 5.75 ²	137 ²	40 CFR 52.21(c) and (d)
2. SV-BINVENT2*	7.375 x 5.75 ²	137 ²	40 CFR 52.21(c) and (d)

*This stack is not required to exhaust vertically.

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGENCLOSEDCONV
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Six corn transfer conveyors without emissions control equipment. These conveyors are enclosed. (PTI 119-19C)

Emission Units: EU-RECEIVINGCONV, EU-BINEMPTCONV1, EU-BINEMPTCONV2, EU-TRANSCONV1, EU-TRANSCONV2, EU-REDIRECTCONV

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any conveyor in FGENCLOSEDCONV unless the conveyor is enclosed.² (R 336.1205(1), R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGC-20
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Corn receiving, storage, and handling operations. All equipment is controlled by baghouse C-20. (PTI 119-19C)

Emission Units: EU-TRUCKPIT, EU-CORNELEV1, EU-CORNELEV2

POLLUTION CONTROL EQUIPMENT

Grain Receiving and Handling Baghouse C-20.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	0.78 pph ²	Hourly	FGC-20	SC V.1, SC VI.1, SC VI.2, SC VI.3	40 CFR 52.21(c) and (d)
2. PM2.5	0.78 pph ²	Hourly	FGC-20	SC V.1, SC VI.1, SC VI.2, SC VI.3	40 CFR 52.21(d)
3. Visible Emissions	5 percent opacity ²	Six-minute average	FGC-20	SC VI.1, SC VI.2	R 336.1301

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FGC-20 unless the grain handling baghouse C-20 is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the grain handling baghouse C-20 includes maintaining it according to the malfunction abatement plant (MAP).² **(R 336.1205(1), R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall equip and maintain baghouse C-20 with a differential pressure monitoring device.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The applicant shall not operate FGC-20 unless the program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations specified in Appendix 9 has been implemented and is maintained.¹ **(R 336.1901)**

See Appendix 9

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Upon request of the AQD District Supervisor, the permittee shall test for PM10 and PM2.5 emission rates from FGC-20, at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. The permittee shall submit a complete report of the test results to the AQD within 60 days following the last date of the test.² (R 336.2001(3), R 336.2001(4))

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall conduct a monthly one-minute visible emissions observation of the FGC-20 vent during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² (R 336.1205(1), R 336.1301)
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGC-20. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and whether repairs were needed. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1205(1), R 336.1301)
3. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor differential pressure across the dust collector. The permittee shall continuously measure the differential pressure and record a daily reading as an indicator of proper operation of the dust collector. The indicator range is 0.1 to 8.0 inches of water. An excursion is a departure from the indicator range. The monitor shall be calibrated once per year.² (R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-20	42 ²	120 ²	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGC-30
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Corn scalping, storage, milling, and transfer operations. All equipment is controlled by baghouse C-30. (PTI 119-19C)

Emission Units: EU-SCALPER1, EU-SCALPER2, EU-DAYBIN1, EU-DAYBIN2, EU-MILL1, EU-MILL2, EU-MILL3, EU-MILL4, EU-FEED

POLLUTION CONTROL EQUIPMENT

Milling Baghouse C-30

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	0.73 pph ²	Hourly	FGC-30	SC V.1, SC VI.1, SC VI.3, SC VI.4	40 CFR 52.21(c) and (d)
2. PM2.5	0.73 pph ²	Hourly	FGC-30	SC V.1, SC VI.1, SC VI.3, SC VI.4	40 CFR 52.21(d)
3. Visible Emissions	5 percent opacity ²	Six-minute average	FGC-30	SC VI.1, SC VI.3	R 336.1301

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any equipment in FGC-30 unless the milling baghouse C-30 is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of milling baghouse C-30 includes maintaining them according to the MAP.² **(R 336.1205(1), R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall equip and maintain baghouses C-30 with differential pressure monitoring devices.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from FGC-30 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD

Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a monthly one-minute visible emissions observation of the FGC-30 vent during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² **(R 336.1205(1), R 336.1301)**
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGC-30. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and whether repairs were needed. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1301)**
3. The permittee shall continuously monitor the differential pressure of baghouse C-30 and record a monthly reading as an indicator of proper operation of the dust collector. The monitor shall be calibrated once per year.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-30	32 ²	120 ²	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGMILL2
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Corn milling. (PTI 144-15C)

Emission Units: EU-MILL5, EU-MILL6, EU-MILL7, EU-MILL8

POLLUTION CONTROL EQUIPMENT

Milling Baghouses C-30A-1, C-30A-2, C-30A-3, C-30A-4

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	0.64 pph ²	Hourly	FGMILL2	SC V.1, VI.1, VI.2, VI.3	40 CFR 52.21 (c) and (d)
2. PM2.5	0.64 pph ²	Hourly	FGMILL2	SC V.1, VI.1, VI.2, VI.3	40 CFR 52.21 (d)
3. Visible Emissions	5 percent opacity ²	Six-minute average	FGMILL2	SC VI.1, VI.2	R 336.1301

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any mill in FGMILL2 unless the associated milling baghouse is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of milling baghouses C-30A-1, C-30A-2, C-30A-3, and C-30A-4 includes maintaining them according to the MAP.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall equip and maintain baghouses C-30A-1, C-30A-2, C-30A-3, and C-30A-4 with differential pressure monitoring devices.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from FGMILL2 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules

and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct a monthly one-minute visible emissions observation of the FGMILL2 vent during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3. If an observation reveals any visible emissions from the vent (other than uncombined water vapor), the permittee shall inspect the particulate control system and perform any maintenance required to eliminate visible emissions.² **(R 336.1301)**
2. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGMILL2. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and whether repairs were needed. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1301)**
3. The permittee shall continuously monitor the differential pressure of baghouses C-30A-1, C-30A-2, C-30A-3, and C-30A-4, and record a monthly reading as an indicator of proper operation of the dust collector. The monitor shall be calibrated once per year.² **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-30A	32 ²	120 ²	40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGFERM
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Exhaust from all fermenters and the beer well.

While the neighboring CO₂ recovery facility is not operating, the emissions from FGFERM are vented to the atmosphere through fermentation CO₂ scrubbers C-40 and C-40A. Emission may vent through the pre-condenser before venting through scrubbers C-40 and C-40A.

While the neighboring CO₂ recovery facility is operating, most or all of the exhaust stream from fermentation CO₂ scrubber C-40 is routed to the CO₂ recovery facility and some of the exhaust stream from fermentation CO₂ scrubber C-40A may be routed to the CO₂ recovery facility.

During fermenter filling, the emissions are routed through purge scrubber C-120 as described in FGPURGE. (PTI 144-15G)

Emission Units: EU-BEERWELL, EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER6, EU-FERMENTER7, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10

POLLUTION CONTROL EQUIPMENT

Pre-condenser and Fermentation CO₂ Scrubbers C-40 and C-40A

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	14.0 pph ²	Hourly	FGFERM through scrubber C-40	SC V.1, VI.2, VI.3, VI.4, VI.5	R 336.1205(1), R 336.1702(a)
2. Acetaldehyde	1.3 pph ²	Hourly	FGFERM through scrubber C-40	SC V.1, VI.2, VI.3, VI.4, VI.5	R 336.1205(1) R 336.1225
3. VOC	13.0 pph ²	Hourly	FGFERM through scrubber C-40A	SC V.1, VI.2, VI.3, VI.4, VI.5	R 336.1205(1), R 336.1702(a)
4. Acetaldehyde	0.93 pph ²	Hourly	FGFERM through scrubber C-40A	SC V.1, VI.2, VI.3, VI.4, VI.5	R 336.1205(1), R 336.1225

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any equipment in FGFERM unless the fermentation CO₂ scrubbers C-40 and C-40A are installed, maintained, and operated in a satisfactory manner as described in the MAP, except as allowed by FGPURGE, SC IV.1. Satisfactory operation includes:
 - a. While the pre-condenser is operating:

- i. Maintaining a minimum daily average scrubber water flow rate and chemical feed rate in scrubber C-40 at or above the scrubber water flow rate and chemical feed rate at which the VOC emission limit was met during the most recent compliance test conducted with the pre-condenser operating.
- ii. Maintaining a minimum daily average scrubber water flow rate and chemical feed rate in scrubber C-40A at or above the scrubber water flow rate and chemical feed rate at which the VOC emission limit was met during the most recent compliance test conducted with the pre-condenser operating.
- iii. Maintaining the minimum daily average pre-condenser water flow rate at one of the following:
 - A. 400 gallons per minute until an acceptable compliance test has been completed,
 - B. The water flow rate at which the VOC emission limits were met during the most recent compliance test conducted with the pre-condenser operating.
- b. While the pre-condenser is not operating:
 - i. Maintaining a minimum daily average scrubber water flow rate and chemical feed rate in scrubber C-40 at or above the scrubber water flow rate and chemical feed rate at which the VOC emission limit was met during the most recent compliance test conducted with the pre-condenser not operating.
 - ii. Maintaining a minimum daily average scrubber water flow rate and chemical feed rate in scrubber C-40A at or above the scrubber water flow rate and chemical feed rate at which the VOC emission limit was met during the most recent compliance test conducted with the pre-condenser not operating.

Satisfactory operation also includes operating liquid flow rate indicators capable of accurately indicating the scrubber water flow rates, scrubber chemical feed rates, and pre-condenser coolant liquid flow rate over the entire range of flow rates that constitutes satisfactory operation.² (R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall test for the VOC and Acetaldehyde emission rates from FGFERM scrubber C-40 and scrubber C-40A, at owner's expense, in accordance with Department requirements. Testing shall be conducted with and without the pre-condenser operating. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² (R 336.1205(1), R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

2. The permittee shall verify the VOC and Acetaldehyde emission rates from FGFERM, at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, R 336.1702(a))**
2. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGFERM:² **(R 336.1205(1), R 336.1225, R 336.1702(a))**
 - a. Results of the most recent VOC and acetaldehyde emission test.
 - b. VOC and acetaldehyde emission rates determined from the VOC and acetaldehyde emission test.
 - c. Hours of operation of FGFERM.
 - d. VOC and acetaldehyde mass emission calculations determining the monthly emission rates in tons per calendar month, based on the VOC and acetaldehyde emission factors and hours of operation.
 - e. VOC and acetaldehyde mass emission calculations determining the annual emission rates in tons per 12-month rolling time period as determined at the end of each calendar month. The permittee shall keep all records on file and make them available to the Department upon request.
3. The permittee shall continuously monitor and record the water flow rates and chemical feed rates of scrubber C-40, and scrubber C-40A; and the pre-condenser water flow rate as an indicator of proper operation of the scrubbers and pre-condenser using the facility's Distributed Control System (DCS) historian. The permittee shall record daily average scrubber water flow rates, chemical feed rates, and pre-condenser flow rates for showing compliance with SC IV.1. The record shall indicate whether or not the pre-condenser was operating by use of the pre-condenser water flow rate data point recorded. The permittee shall perform an annual zero-check on the monitor.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-40	24 ²	100 ²	R 336.1225 40 CFR 52.21(c) and (d)
2. S-40A	24 ²	75 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGPURGE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

While the neighboring CO₂ recovery facility is operating, the exhaust stream from fermentation CO₂ scrubbers C-40 and/or C-40A may be routed to the CO₂ recovery facility.

Exhaust from a fermenter during the clean in place and initial filling is not suitable for use at the CO₂ recovery facility; therefore, the emissions from fermenter cleaning and filling may be controlled by purge scrubber C-120, which vents to atmosphere. Interlocks ensure that only one fermenter vents to the purge scrubber at a time. (PTI 144-15G)

Emission Units: EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER6, EU-FERMENTER7, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10

POLLUTION CONTROL EQUIPMENT

Purge Scrubber C-120

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not vent emission through Purge Scrubber C-120 for more than 5,000 hours per 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205(1), R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not fill any fermenter unless the purge scrubber C-120 is installed, maintained, and operated in a satisfactory manner as described in the MAP. Satisfactory operation includes maintaining the scrubber liquid flow rate and the reservoir liquid level in the range identified in the MAP as constituting satisfactory operation.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall equip and maintain the purge scrubber C-120 with a liquid flow rate indicator capable of accurately indicating the scrubber liquid flow rate over the entire range of flow rates that constitutes satisfactory operation, as described in the MAP.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² (R 336.1225, R 336.1702(a))
2. The permittee shall keep, in a satisfactory manner, a log of the 12-month rolling time period hours that emissions vent through purge scrubber C-120. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(3), R 336.1225, R 336.1702(a))
3. The permittee shall continuously monitor the scrubber C-120 liquid flow rate as an indicator of proper operation of the scrubber.² (R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-120	7.5 ²	40 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGOXID
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

All equipment venting to thermal oxidizer C-10. (PTI 144-15E)

Emission Units: EU-RECTIFIER, EU-SIDESTRIPPER, EU-BEERCOLUMN, EU-YEASTTANK, EU-YEASTTANK2, EU-DRYER1, EU-DRYER2, EU-TO&WHRB, EU-CENTRIFUGE1, EU-CENTRIFUGE2, EU-CENTRIFUGE3, EU-CENTRIFUGE4, EU-190PROOFCOND, EU-200PROOFCOND

POLLUTION CONTROL EQUIPMENT

Thermal Oxidizer C-10

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	3.1 pph ²	Hourly	FGOXID	SC V.1, VI.12	40 CFR 52.21(c) and (d)
2. PM2.5	3.1 pph ²	Hourly	FGOXID	SC V.1, VI.13	40 CFR 52.21(d)
3. VOC	4.2 pph ²	Hourly	FGOXID	SC V.1, VI.14	R 336.1702(a)
4. NOx	27.5 pph ²	24-hour rolling average	FGOXID	SC VI.5, VI.16	40 CFR 52.21(c) and (d)
5. CO	21.4 pph ²	Hourly	FGOXID	SC V.1, VI.15	40 CFR 52.21(d)
6. Acetaldehyde	0.35 pph ²	Hourly	FGOXID	SC V.1, VI.14	R 336.1205(1), R 336.1225
7. NOx	0.1 lb/MMBTU ²	30-day rolling average	EU-TO&WHRB	40 CFR 60.46b(c) 60.48b(b)	R 336.1205(1), 40 CFR 60.44b(a)
8. Visible Emissions	5 percent opacity ²	Six-minute average	FGOXID	SC VI.2	R 336.1205(1), R 336.1301

II. MATERIAL LIMIT(S)

1. The permittee shall use only sweet natural gas as fuel in EU-DRYER1 and EU-DRYER2.² (**R 336.1205(1), R 336.1205(2), 40 CFR 52.21(c) and (d)**)
2. The permittee shall use only sweet natural gas as supplemental fuel in thermal oxidizer C-10.² (**R 336.1205(1), R 336.1205(2), 40 CFR 52.21(c) and (d)**)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FGOXID unless thermal oxidizer C-10 is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the thermal oxidizer according to the MAP. The thermal oxidizer shall be capable of attaining a minimum VOC destruction efficiency of 98 percent by weight, and maintaining the combustion chamber temperature of the thermal oxidizer at not less than 1400°F or not less than 50°F below the average combustion chamber temperature at which the VOC emission limit was met during the most recent compliance test, whichever is higher. Operation during startup, including EU-RTO&HRSG combustion chamber temperature, shall be in accordance with the MAP.² (**R 336.1205(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) and (d)**)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify the thermal oxidizer C-10 VOC destruction efficiency and the PM10, PM2.5, VOC, NOx, CO, and acetaldehyde emission rates from FGOXID by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall verify the PM10, PM2.5, VOC, NOx, CO, and VOC destruction efficiency emission rates from the thermal oxidizer C-10, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall install, calibrate, and maintain in a satisfactory manner a device to monitor and record on a continuous basis the combustion chamber temperature of the thermal oxidizer C-10. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The combustion chamber temperature of the thermal oxidizer shall be maintained at not less than 1400°F or not less than 50°F below the average combustion chamber temperature at which the VOC emission limit was met during the most recent compliance test, whichever is higher. The temperature monitoring device shall be calibrated once per calendar year.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall conduct a monthly one-minute visible emissions observation of the thermal oxidizer C-10 vent during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3.² **(R 336.1205(1), R 336.1301)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NOx emissions for EU-TO&WHRB on a continuous basis and according to the procedures outlined in Appendix 3 (NOx and CO₂/O₂ Monitoring CEMS Requirements) and 40 CFR Part 60.48b(b)(1), (c), (d), (e), (f).² **(R 336.1205(1), 40 CFR 60.48b)**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the flue gas oxygen concentration for EU-TO&WHRB on a continuous basis and according to the procedures outlined in Appendix 3 (NOx and CO2/O2 Monitoring CEMS Requirements) and 40 CFR 60.48.² **(R 336.1205(1), 40 CFR 60.48b)**
5. The permittee shall keep, in a satisfactory manner, records of the occurrence and duration of any startup, shutdown, or malfunction in the operation; or any periods during which a continuous monitoring system or monitoring device is inoperative. The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.7)**
6. The permittee shall keep, in a satisfactory manner, continuous records of the combustion chamber temperature of thermal oxidizer C-10. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**
7. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for the thermal oxidizer. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and whether repairs were needed. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1301)**
8. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))**
9. The permittee shall keep, in a satisfactory manner, daily, monthly and 12-month rolling time period average natural gas use records and the annual capacity factor for EU-TO&WHRB. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each month. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 60.49b(d))**
10. The permittee shall keep, in a satisfactory manner the following records for EU-TO&WHRB for each calendar day pursuant to the requirements of 40 CFR 60.49b:
 - a. Calendar date that EU-TO&WHRB was in operation.
 - b. Average hourly NOx emission rate in lb/MMBTU heat input.
 - c. 30-day average NOx emission rate in lb/MMBTU heat input, calculated at the end of each operating day from the hourly NOx emission rates for the preceding 30-days.
 - d. Excess emissions, reasons for excess emissions, and description for corrective actions taken.
 - e. Identification of the operating days for which NOx data has not been obtained, reasons for not obtaining the data and description of corrective actions taken.
 - f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding the data.
 - g. Identification of the "F" factor used for calculations, method of determining the "F" factor and type of fuel combusted.
 - h. Identification of the times when the NOx concentration exceeds full span of the continuous emission monitoring system.
 - i. Description of any modifications to the continuous emission monitoring system that could affect the ability of the continuous emission monitor to comply with Performance Specification 2.
 - j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Procedure 1 of Appendix F of 40 CFR Part 60.

The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 60.49b(g), (h), (i), (o), (w))**

11. The permittee shall keep records of fuel supplier certifications of the sulfur content of the fuels burned in FGOXID. The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.45b(k), 40 CFR 60.46b(i), 40 CFR 60.47b(g), 40 CFR 60.48b(j))**
12. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID:
 - a. Results of the most recent PM10 emission test.
 - b. PM10 emission rate determined from the PM10 emission test.
 - c. Hours of operation of FGOXID.
 - d. PM10 mass emission calculations determining the monthly emission rate in tons per calendar month, based on the PM10 emission rate and hours of operation.
 - e. PM10 mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(40 CFR 52.21(c) and (d))**

13. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID:
 - a. Results of the most recent PM2.5 emission test.
 - b. PM2.5 emission rate determined from the PM2.5 emission test.
 - c. Hours of operation of FGOXID.
 - d. PM2.5 mass emission calculations determining the monthly emission rate in tons per calendar month, based on the PM2.5 emission rate and hours of operation.
 - e. PM2.5 mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(40 CFR 52.21 (c) and (d))**

14. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID:
 - a. Results of the most recent VOC and acetaldehyde emission test.
 - b. VOC and acetaldehyde emission rates determined from the VOC and acetaldehyde emission test.
 - c. Hours of operation of FGOXID.
 - d. VOC and acetaldehyde mass emission calculations determining the monthly emission rates in tons per calendar month, based on the VOC and acetaldehyde emission rates and hours of operation.
 - e. VOC and acetaldehyde mass emission calculations determining the annual emission rates in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, R 336.1702(a))**

15. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID:
 - a. Results of the most recent CO emission test.
 - b. CO emission rate determined from the CO emission test.
 - c. Hours of operation of FGOXID.

- d. CO mass emission calculations determining the monthly emission rates in ton per calendar month, based on the CO emission rate and hours of operation.
- e. CO mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(40 CFR 52.21(d))**

- 16. The permittee shall keep, in a satisfactory manner, the 24-hour rolling average NOx emission rate for FGOXID, as determined using the Continuous Emission Monitor System (CEMS) data. The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 52.21(c) and (d))**

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- 4. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
- 5. The permittee shall submit notification to the AQD District Supervisor of the design heat input capacity, the identification of fuels to be combusted and the annual capacity factor for EU-TO&WHRB as required by 40 CFR 60.7 and 40 CFR 60.49b(a).² **(40 CFR 60.49b(a))**
- 6. Reports of the records kept as required by SC VI.10 shall be submitted every six months in accordance with 40 CFR 60.49b(w).² **(R 336.1205(1), 40 CFR 60.49b(g), (h), (i), (o), (w))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-10	72 ²	125 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Db, as they apply to the equipment in FGOXID.²
(40 CFR Part 60, Subparts A and Db)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGOXID2
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

All equipment venting to regenerative thermal oxidizer C-10A. (PTI 144-15C)

Emission Units: EU-RECTIFIER2, EU-SIDESTRIPPER2, EU-BEERCOLUMN2, EU-DRYER3, EU-DRYER4, EU-CENTRIFUGE5, EU-CENTRIFUGE6, EU-CENTRIFUGE7, EU-CENTRIFUGE8, EU-190PROOFCOND2, EU-RTO2

POLLUTION CONTROL EQUIPMENT

Regenerative Thermal Oxidizer C-10A

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	5.01 pph ²	Hourly	FGOXID2	SC V.1, VI.7	40 CFR 52.21 (c) and (d)
2. PM2.5	5.01 pph ²	Hourly	FGOXID2	SC V.1, VI.9	40 CFR 52.21 (d)
3. VOC	4.5 pph ²	Hourly	FGOXID2	SC V.1, VI.8	R 336.1702(a)
4. NOx	10.8 pph ²	Hourly	FGOXID2	SC V.1, VI.7	40 CFR 52.21 (c) and (d)
5. CO	9.1 pph ²	Hourly	FGOXID2	SC V.1, VI.9	40 CFR 52.21 (d)
6. Acetaldehyde	0.33 pph ²	Hourly	FGOXID2	SC V.1, VI.8	R 336.1205(1), R 336.1225
7. SO ₂	10.8 pph ²	Hourly	FGOXID2	SC V.1, VI.7	40 CFR 52.21 (c) and (d)
8. Visible Emissions	5 percent opacity	Six-minute average	FGOXID2	SC VI.2, VI.4	R 336.1301

II. MATERIAL LIMIT(S)

1. The permittee shall use only sweet natural gas as fuel in EU-DRYER3 and EU-DRYER4.² **(R 336.1205(1), 40 CFR 52.21(c) & (d))**
2. The permittee shall use only sweet natural gas as supplemental fuel in regenerative thermal oxidizer C-10A.² **(R 336.1205(1), 40 CFR 52.21(c) & (d))**
3. The permittee shall not burn more than 946 million standard cubic feet of natural gas combined per 12-month rolling time period, as determined at the end of each calendar month, in FGOXID2.² **(R 336.1205(1))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FGOXID2 unless regenerative thermal oxidizer C-10A is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes maintaining the regenerative thermal oxidizer according to the MAP. The regenerative thermal oxidizer shall be capable of attaining a minimum VOC destruction efficiency of 98 percent by weight, and maintaining the combustion chamber temperature of the regenerative thermal oxidizer at not less than 1400°F or not less than 50°F below the average combustion chamber temperature at which the VOC emission limit was met during the most recent compliance test, whichever is higher. Operation during startup, including EU-RTO2 combustion chamber temperature, shall be in accordance with the MAP.² **(R 336.1205(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify the regenerative thermal oxidizer C-10A VOC destruction efficiency and the PM10, PM2.5, VOC, NOx, CO, SO₂, and acetaldehyde emission rates from FGOXID2 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M
NOx	40 CFR Part 60, Appendix A
SO ₂	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall verify the PM10, PM2.5, VOC, NOx, CO, SO₂, acetaldehyde and VOC destruction efficiency emission rates from the regenerative thermal oxidizer C-10A, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall install, calibrate, and maintain in a satisfactory manner a device to monitor and record on a continuous basis the combustion chamber temperature of the regenerative thermal oxidizer C-10A. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The temperature monitoring device shall be calibrated once per calendar year.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall conduct a monthly one-minute visible emissions observation of the regenerative thermal oxidizer C-10A vent during routine operating conditions. For the purpose of this condition, such observations shall follow the procedures to record the reading, perform maintenance, and eliminate visible emissions outlined in Appendix 3.² **(R 336.1205(1), R 336.1301)**

3. The permittee shall keep, in a satisfactory manner, continuous records of the combustion chamber temperature of regenerative thermal oxidizer C-10A. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for the regenerative thermal oxidizer. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and whether repairs were needed. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), R 336.1301)**
5. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
6. The permittee shall keep, in a satisfactory manner, daily, monthly, and 12-month rolling time period average natural gas use records for EU-RTO2. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1))**
7. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID2:
 - a. Results of the most recent PM10, SO₂, and NO_x emission tests.
 - b. PM10, SO₂, and NO_x emission rates determined from the PM10, SO₂, and NO_x emission tests.
 - c. Hours of operation of FGOXID2.
 - d. PM10, SO₂, and NO_x emission calculations determining the monthly emission rates in tons per calendar month, based on the PM10, SO₂, and NO_x emission rates and hours of operation.
 - e. PM10, SO₂, and NO_x emission calculations determining the annual emission rates in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(40 CFR 52.21(c) & (d))**

8. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID2:
 - a. Results of the most recent VOC and acetaldehyde emission test.
 - b. VOC and acetaldehyde emission rates determined from the VOC and acetaldehyde emission test.
 - c. Hours of operation of FGOXID2.
 - d. VOC and acetaldehyde mass emission calculations determining the monthly emission rates in tons per calendar month, based on the VOC and acetaldehyde emission rates and hours of operation.
 - e. VOC and acetaldehyde mass emission calculations determining the annual emission rates in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a))**

9. The permittee shall keep the following information on a monthly and 12-month rolling time period, as determined at the end of each calendar month, for FGOXID2:
 - a. Results of the most recent PM2.5 and CO emission test.
 - b. PM2.5 and CO emission rate determined from the PM2.5 and CO emission test.
 - c. Hours of operation of FGOXID2.

- d. PM2.5 and CO mass emission calculations determining the monthly emission rates in ton per calendar month, based on the PM2.5 and CO emission rate and hours of operation.
- e. PM2.5 and CO mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² **(40 CFR 52.21(d))**

- 10. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for FGOXID2 for each calendar month and 12-month rolling time period as determined at the end of each calendar month. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 52.21(c) & (d))**

See Appendix 3

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- 4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-10A	84 ²	150 ²	R 336.1225, 40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGCAMUNITS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

The equipment in this flexible group is subject to Compliance Assurance Monitoring, 40 CFR 64.6

Emission Units: EU-TRUCKPIT, EU-CORNELEV1, EU-CORNELEV2, EU-SCALPER1, EU-SCALPER2, EU-DAYBIN1, EU-DAYBIN2, EU-MILL1, EU-MILL2, EU-MILL3, EU-MILL4, EU-MILL5, EU-MILL6, EU-MILL7, EU-MILL8, EU-FEED, EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER6, EU-FERMENTER7, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10, EU-BEERWELL, EU-YEASTTANK, EU-YEASTTANK2, EU-DRYER1, EU-DRYER2, EU-DRYER3, EU-DRYER4, EU-190PROOFCOND, EU-200PROOFCOND, EU-190PROOFCOND2, EU-BEERCOLUMN, EU-BEERCOLUMN2, EU-CENTRIFUGE1, EU-CENTRIFUGE2, EU-CENTRIFUGE3, EU-CENTRIFUGE4, EU-CENTRIFUGE5, EU-CENTRIFUGE6, EU-CENTRIFUGE7, EU-CENTRIFUGE8, EU-RECTIFIER, EU-RECTIFIER2, EU-SIDESTRIPPER, EU-SIDESTRIPPER2, EU-TO&WHRB, EU-RTO2, EU-COOLINGDRUM

POLLUTION CONTROL EQUIPMENT

Baghouses:

1. EU-COOLINGDRUM - Baghouse C-70A
2. FGC-20 - Grain Receiving and Handling Baghouse C-20
3. FGC-30 - Milling Baghouse C-30
4. FGMILL2 - Milling Baghouses C-30A-1, C-30A-2, C-30A-3, C-30A-4

Packed Bed Scrubbers:

1. FGFERM - Pre-condenser and Fermentation CO₂ Scrubbers C-40 and C-40A

Thermal Oxidizer and Regenerative Thermal Oxidizer

1. FGOXID - Thermal Oxidizer C-10
2. FGOXID2 - Regenerative Thermal Oxidizer C-10A

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

Baghouses:

1. The permittee shall continuously measure the pressure drop and record the pressure drop once per day as an indicator of proper operation of the baghouses. The indicator ranges for the baghouses are 0.5-8 inches of H₂O. **(40 CFR 64.6(c)(1)(i) and (ii))**
2. The permittee shall record a monthly visible emissions reading using USEPA Reference Method 22 as an indicator of proper operation of the baghouses. The indicator is the absence of visible emissions. An excursion is any visible emissions other than condensed water vapor. **(40 CFR 64.6(c)(1)(i) and (ii))**
3. The pressure drop gauge shall continuously monitor pressure drop. The averaging period is instantaneously. The monitor shall be calibrated annually. **(40 CFR 64.6(c)(1)(iii))**
4. An excursion for the baghouse pressure drop is a departure from the indicator range 0.5-8 inches of H₂O which will trigger an inspection and corrective action. **(40 CFR 64.6(c)(2))**

Packed Bed Scrubbers:

5. The permittee shall continuously monitor and record the scrubber liquid flow rate for each scrubber as an indicator of proper operation of the scrubbers. The indicator range for each scrubber is the minimum flowrate specified below or a minimum flowrate established during the most recent performance test which showed compliance with the emission limits. **(40 CFR 64.6(c)(1)(i) and (ii))**

Scrubber C-40 46 Gallons per Minute (GPM) with pre-condenser operating, or
64 GPM without pre-condenser operating

Scrubber C-40A 36 GPM with pre-condenser operating
64 GPM without pre-condenser operating

6. The flow meters shall continuously monitor scrubber liquid flow rate through each scrubber. The averaging period is hourly. The monitors shall have weekly zero-flow checks and calibrated annually or according to manufacturer recommendations, whichever is more frequent. **(40 CFR 64.6(c)(1)(iii))**
7. An excursion for the scrubber flow rate indicator is a departure from the minimum flow rate specified in SC VI.5. **(40 CFR 64.6(c)(2))**

Thermal Oxidizer C-10 (TO) and Regenerative Thermal Oxidizer (RTO) C-10A

8. The permittee shall continuously monitor combustion chamber temperature and record hourly, maintaining a 3-hour average for the TO and the RTO as an indicator of proper operation of the TO and the RTO. The indicator range for the TO and the RTO is a minimum combustion temperature specified below or a minimum combustion temperature not less than 50F below the average combustion chamber temperature at which the VOC emission limit was met during the most recent performance test, whichever is higher. **(40 CFR 64.6(c)(1)(i) and (ii))**

TO = Minimum combustion temperature of not less than 1450°F
RTO = Minimum combustion temperature of not less than 1650°F

9. The temperature monitor shall continuously monitor the combustion temperature of the TO and the RTO. The averaging period is 3 hours. The monitor shall be calibrated annually or according to manufacturer recommendations, whichever is more frequent. **(40 CFR 64.6(c)(1)(iii))**
10. An excursion for the TO and RTO combustion temperature is a departure from the indicator range specified in SC VI. 8. **(40 CFR 64.6(c)(2))**
11. The permittee shall inspect the TO and RTO burners annually as specified in the facility's Malfunction Abatement Plan (MAP) for the TO and RTO. A monitoring and maintenance program excursion is defined as a failure to properly implement the monitoring, inspection and/or maintenance requirements as specified in the MAP. **(40 CFR 64.6(c)(1) and (2), 40 CFR 64.6(c)(2))**
12. 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))**

Corrective Actions:

Baghouses: Presence of any visible emissions from the vent or pressure drop above range will trigger particulate control system inspection, bags replacement and any maintenance required to eliminate visible emissions.

Packed Bed Scrubbers: An excursion on the Scrubber Liquid Flow Rate would trigger an inspection and corrective actions (e.g., Flow Meter Check, Check for Blockage), as specified in the facility's Malfunction Abatement Plan.

Thermal Oxidizer and Regenerative Thermal Oxidizer: For low temperature excursions a corrective action would be to inspect the thermocouple and replace if necessary. For burner inspection excursions the corrective action would be to perform burner inspection at the next available outage

13. 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))**
14. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
15. 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))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. 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))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
2. 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 ROP and 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))**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGLOADOUT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Two denatured ethanol truck load-outs and one denatured ethanol rail load-out. (PTI 144-15C)

Emission Units: EU-LOADOUTRL, EU-LOADOUTTRK, EU-LOADOUTTRK2

POLLUTION CONTROL EQUIPMENT

Ethanol Load-out Flare P-50, Ethanol Load-out Flare P-50_A

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-LOADOUTRL or EU-LOADOUTTRK unless the ethanol load-out flare P-50 is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the ethanol load-out flare P-50 includes maintaining it according to the MAP.² (R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910))
2. The permittee shall not operate EU-LOADOUTTRK2 unless the ethanol load-out flare P-50_A is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the ethanol load-out flare P-50_A includes maintaining it according to the MAP.² (R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. S-50	30 ²	36 ²	R 336.1225, 40 CFR 52.21(c)&(d)
2. S-50A	72 ²	36 ²	R 336.1225, 40 CFR 52.21(c)&(d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGNSPSTANKS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Ethanol, denaturant, and denatured ethanol storage tanks. Emissions are controlled by internal floating roofs. (PTI 144-15C)

Emission Units: EU-190PROOF, EU-200PROOF, EU-DENATTANK1, EU-DENATTANK2, EU-DENATTANK3, EU-DENATURANT

POLLUTION CONTROL EQUIPMENT

Internal floating roofs

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Kb, as they apply to the equipment in FGNSPSTANKS.² **(40 CFR Part 60, Subparts A and Kb)**
2. The permittee shall not load EU-DENATURANT with gasoline from a delivery vessel unless EU-DENATURANT is equipped with a permanent submerged fill pipe.² **(R 336.1205(1), R 336.1225, R 336.1704, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip each tank in FG-NSPSTANKS according to the requirements of 40 CFR 60.112b(a)(1) through (4). These requirements include, but are not limited to, the following:² **(R 336.1205(1), R 336.1225, R 336.1702(b), R 336.1910, 40 CFR Part 60, Subparts A & Kb)**
 - a. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. **(40 CFR 60.112b(a)(1)(i))**
 - b. Each internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the edge of the internal floating roof that meets the requirements of 40 CFR 60.112b(a)(1)(ii). **(40 CFR 60.112b(a)(1)(ii))**
 - c. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. **(40 CFR 60.112b(a)(1)(iii))**
 - d. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. **(40 CFR 60.112b(a)(1)(iv))**

- e. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. **(40 CFR 60.112b(a)(1)(v))**
 - f. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. **(40 CFR 60.112b(a)(1)(vi))**
 - g. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. **(40 CFR 60.112b(a)(1)(vii))**
 - h. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. **(40 CFR 60.112b(a)(1)(viii))**
 - i. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. **(40 CFR 60.112b(a)(1)(ix))**
2. The permittee shall equip and maintain each FG-NSPSTANKS storage tank with the deck and seal configuration listed in the following table, or a deck and seal configuration that results in the same or lower VOC emissions from the tank.² **(R 336.1205(1), R 336.1225, R 336.1702(a), R 336.1910)**

Roof Type	Deck Type	Primary Seal	Secondary Seal
Internal floating roof	Welded	Vapor mounted	Rim mounted

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 1. The permittee shall perform inspections and monitor operating information for FG-NSPSTANKS as required by 40 CFR 60.113b. These requirements include, but are not limited to, the following:² **(R 336.1205(1), R 336.1225, R 336.1702(b), R 336.1910, 40 CFR Part 60, Subparts A & Kb):**
 - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal prior to filling the storage vessel with volatile organic liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel. **(40 CFR 60.113b(a)(1))**
 - b. Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than ten percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than ten years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and 40 CFR 60.113b(a)(3)(ii) and at intervals no greater than five years in the case of vessels specified in 40 CFR 60.113b(a)(3)(i). **(40 CFR 60.113b(a)(4))**
- 2. The permittee shall keep records of inspections and operating information for FG-NSPSTANKS as required by 40 CFR Part 60 Subparts A and Kb. The permittee shall keep all records on file and make them available to the Department upon request. These requirements include, but are not limited to, the following:² **(R 336.1205(1), R 336.1225, R 336.1702(b), R 336.1910, 40 CFR Part 60, Subparts A & Kb):**
 - a. Keep a record of each inspection performed as required by 40 CFR 60.113b(a). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). **(40 CFR 60.115b(a)(2))**

- b. For each storage vessel as specified in 40 CFR 60.110b(a), keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the storage vessel. **(40 CFR 60.116b(b))**
- c. For each storage vessel, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. **(40 CFR 60.116b(c))**

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- 4. The permittee shall submit reports for FGNSPSTANKS as required by 40 CFR 60.115b. These requirements include, but are not limited to, the following:² **(R 336.1205(1), R 336.1225, R 336.1702(b), R 336.1910, 40 CFR Part 60 Subparts A & Kb):**
 - a. A report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1) shall be furnished to the AQD District Supervisor as an attachment to the notification required by 40 CFR 60.7(a)(3). **(40 CFR 60.115b(a)(1))**
 - b. If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the AQD District Supervisor within 30 days of the inspection, identifying the tank, the nature of the defects, and the date the tank was emptied or the nature of and date the repair was made. **(40 CFR 60.115b(a)(3))**
 - c. After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the AQD District Supervisor within 30 days of the inspection, identifying the tank and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3), and list each repair made. **(40 CFR 60.115b(a)(4))**
- 5. The permittee shall submit notifications for FGNSPSTANKS as required by 40 CFR Part 60 Subparts A and Kb. These requirements include, but are not limited to, notifying the AQD in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(a)(1) and (a)(4) to afford the AQD the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b(a)(4) is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the AQD at least seven days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the AQD at least seven days prior to the refilling.² **(40 CFR 60.113b(a)(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Kb, as they apply to the equipment in FGNSPSTANKS.
(40 CFR Part 60, Subparts A and Kb)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGCHP
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Combined heat and power (CHP) system to generate electricity and steam for the facility. The CHP system consist of a combustion turbine and a duct burner with a heat recovery steam generator (HRSG) to generate steam from the heat provided by the turbine exhaust and/or the heat provided by the duct burner. The CHP system can operate in three modes: turbine only, turbine and duct burner, and duct burner only. (PTI 144-15G)

Emission Units: EU-CT, EU-DB

POLLUTION CONTROL EQUIPMENT

A dry low NOx burner for NOx control on the turbine.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NOx	42 ppmvd at 15% O ₂ ²	Hourly / except when operating at temperatures less than 0°F	FGCHP	SC V.2, VI.3, VI.4, VI.7, VI.8	R 336.1205(1)(a) and (b), 40 CFR 60.4320(a)
2. NOx	120 ppmvd at 15% O ₂ ²	Hourly / when operating at temperatures less than 0°F	FGCHP	SC V.2, VI.3, VI.4, VI.7, VI.8	R 336.1205(1), 40 CFR 52.21(c) and (d), 40 CFR 60.4320(a)
3. NOx	54 ppmvd at 15% O ₂ ²	Hourly / when the combustion turbine is not operating	EU-DB	SC V.2, VI.3, VI.7, VI.8	R 336.1205(1), 40 CFR 52.21(c) and (d), 40 CFR 60.4320(a)
4. NOx	35.0 pph ²	Hourly / when the combustion turbine is not operating	EU-DB	SC V.2, VI.3, VI.7, VI.8	R 336.1205(1)
5. NOx	52.5 pph ²	Hourly / when operating at temperatures less than 0°F	FGCHP	SC V.2, VI.3, VI.4, VI.7, VI.8	R 336.1205(1), 40 CFR 52.21(c) and (d)
6. NOx	14.0 pph ²	Hourly / when the combustion turbine is operating, except when operating at temperatures less than 0°F	FGCHP	SC V.2, VI.3, VI.4, VI.7, VI.8	R 336.1205(1)
7. CO	42.8 pph ²	Hourly / except during startup and shutdown**	FGCHP	SC V.1, VI.7	R 336.1205(1)
8. CO	410.3 pph ²	Operating hour during startup**	FGCHP	SC VI.7	R 336.1205(1), 40 CFR 52.21(d)
9. CO	223 pph ²	Operating hour during shutdown**	FGCHP	SC VI.7	R 336.1205(1), 40 CFR 52.21(d)
10. PM10	2.9 pph ²	Hourly	FGCHP	SC V.1, VI.7	R 336.1205(1), 40 CFR 52.21(c) and (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
11. PM2.5	2.9 pph ²	Hourly	FGCHP	SC V.1, VI.7	R 336.1205(1), 40 CFR 52.21(d)
12. VOC	3.2 pph ²	Hourly	FGCHP	SC V.1, VI.7	R 336.1205(1), R 336.1702(a)

ppmvd = parts per million by volume at 15 percent oxygen and on a dry gas basis

** Startup is defined as the period of time from synchronization to the grid (generator breaker closed) until the unit reaches steady state operation (loads greater than 50 percent of design capacity). Shutdown is defined as that period of time from the initial lowering of the turbine output below 50 percent of full operating load, with the intent to shut down, until the point at which the generator breaker opens.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas in any unit in FGCHP.² **(R 336.1205(1), R 336.1225, R 336.1401, R 336.1702(a), 40 CFR 60.4330)**
2. The permittee shall not burn more than 71.7 million standard cubic feet of natural gas per 12-month rolling time period, as determined at the end of each calendar month, while operating EU-DB in fresh air firing mode.² **(R 336.1205(1))**
3. The permittee shall not burn more than 842 million standard cubic feet of natural gas per 12-month rolling time period, as determined at the end of each calendar month, in EU-CT.² **(R 336.1205(1))**
4. The permittee shall not burn more than 977 million standard cubic feet of natural gas per 12-month rolling time period, as determined at the end of each calendar month, in EU-DB.² **(R 336.1205(1))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any unit in FGCHP unless a MAP as described in Rule 911(2), has been submitted and is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.
 - d. Identification of the source, and operating variables and ranges for varying loads, shall be monitored and recorded. The normal operating range of these variables and a description of the method of monitoring shall be maintained.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 90 days after such an event occurs. The permittee shall also amend the MAP within 90 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² **(R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

2. The permittee shall operate and maintain FGCHP, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.² **(40 CFR 60.4333(a))**
3. The total hours for startup and shutdown for EU-CT shall not exceed 100 hours per 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205(1))**
4. The total hours for operation at temperatures less than 0°F for EU-CT shall not exceed 200 hours per 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205(1))**
5. The capacity factor for operating EU-DB in fresh air firing mode shall not exceed 10% on an annual basis.² **(40 CFR Part 60, Subpart Db)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum design heat input capacity for FGCHP shall not exceed, on a fuel heat input basis, 257.4 MMBTU per hour.² **(R 336.1205(1), 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FGCHP unless the SoLoNOx dry low NOx burner is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the control device in accordance with an approved MAP for FGCHP as required in SC III.1.² **(R 336.1205(1), R 336.1225, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the natural gas flow rate to FGCHP on a continuous basis. The device, shall be operated in accordance with 40 CFR 60.4345(c).² **(R 336.1205(1), 40 CFR 52.21(c) & (d), 40 CFR 60.4345)**
4. As an alternative to conducting annual performance tests as required by 40 CFR 63.4340(a), the permittee may install, calibrate, maintain, and operate a continuous parameter monitoring system for NOx emissions that continuously monitors the appropriate parameters to determine whether the unit is operating in low-NOx mode. The permittee shall establish and document the continuous parameter monitoring system in accordance with 40 CFR 60.4355 and 40 CFR 60.4410.² **(40 CFR 60.4340(b)(2)(ii), 40 CFR 60.4355, 40 CFR 60.4410)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall verify PM10, PM2.5, CO, and VOC emission rates from FGCHP by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM10/PM2.5	40 CFR Part 51, Appendix M
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1331, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

2. If the permittee does not use the continuous emissions monitoring allowance as specified in SC VI.3 and VI.4, then within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup, federal Standards of Performance for New Stationary Sources require verification of NO_x emission rates from FGCHP, by testing at owner's expense, in accordance with 40 CFR 60.8 and 60.4400.
 - a. The permittee shall conduct three separate test runs, at least 20 minutes each, at ambient temperatures greater than 0 °F, and at any load condition within ±25 percent of 100 percent peak load.
 - b. Testing must be conducted annually (at least every 14 calendar months).
 - c. If the stack test result is less than or equal to 75 percent of the NO_x limits in SC I.1, the test plan can be changed to once every two years (at least every 26 calendar months). If subsequent test results yield NO_x emissions greater than 75 percent of the NO_x limit in SC I.1, annual testing must be resumed.
 - d. Subsequent stack testing is not required if the permittee shows continuous compliance with the NO_x emission limits with a CEMS or equivalent PEMS pursuant to 40 CFR 60.4340(b)(ii), as specified in SC VI.1.
 - e. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable Federal Reference Methods, 40 CFR Part 60, Appendix A.

No less than 45 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(40 CFR 60.4400)**

3. The permittee shall verify the PM₁₀, PM_{2.5}, CO, and VOC emission rates from FGCHP, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205(1), 40 CFR 52.21(c) and (d))**
2. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for EU-CT and for EU-DB for each calendar month and 12-month rolling time period as determined at the end of each calendar month. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1), 40 CFR 52.21(c) and (d))**
3. In lieu of the stack testing required in SC V.2, the permittee may instead install, calibrate, maintain, and operate one of the following continuous monitoring systems:² **(40 CFR 60.4340(b))**
 - a. Continuous emission monitoring as described in 40 60.4335(b) and 60.4345, or
 - b. Continuous parameter monitoring as follows:
 - i. For a diffusion flame turbine without add-on selective catalytic reduction (SCR) controls, the permittee shall define parameters indicative of the unit's NO_x formation characteristics and monitor these parameters continuously.
 - ii. For any lean premix stationary combustion turbine, the permittee shall continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_x mode.
 - iii. For any turbine that uses SCR to reduce NO_x emissions, the permittee shall continuously monitor appropriate parameters to verify the proper operation of the emission controls.
 - iv. For affected units that are also regulated under 40 CFR Part 75, with state approval the permittee may monitor the NO_x emission rate using the methodology in Appendix E to 40 CFR Part 75, or the low mass

emissions methodology in 40 CFR 75.19, the requirements of this condition may be met by performing the parametric monitoring described in Section 2.3 of 40 CFR Part 75 Appendix E or in 40 CFR 75.19(c)(1)(iv)(H).

4. In lieu of the subsequent stack test requirements listed in SC V.2, the permittee may instead continuously monitor appropriate parameters to determine that the turbine is operating in low-NO_x mode. The parameters must be continuously monitored and recorded during the initial performance test to establish acceptable values and ranges. The permittee must develop and keep on-site a parameter monitoring plan pursuant to 40 CFR 60.4355 (a)(1) through (6).² **(40 CFR 60.4340(b)(ii), 40 CFR 60.4355, 40 CFR 60.4410)**
5. The permittee shall monitor the sulfur content in the fuel once per turbine operating day, using the methods described in 40 CFR 60.4415, or alternate methods as described in 40 CFR 60.4360. The permittee may use a custom monitoring schedule pursuant to 40 CFR 60.4370(c) if the schedule has been approved by the EPA Administrator. Sulfur in fuel monitoring is not required if it is demonstrated that the potential sulfur emissions do not exceed 26 ng SO₂/Joules (0.060 lb SO₂/MMBTU) heat input. The demonstration shall include one of the following:² **(40 CFR 60.4360, 40 CFR 60.4370)**
 - a. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content is 20 grains of sulfur per 100 standard cubic feet or less; or
 - b. Representative fuel sampling data, as specified in 40 CFR Part 75, Appendix D, Section 2.3.1.4 or 2.3.2.4, shows that the sulfur content does not exceed 26 ng SO₂/Joules (0.060 lb SO₂/MMBTU) heat input.
6. The permittee shall keep, in a satisfactory manner, records of the sulfur content of the fuel once each operating day for FGCHP, as required by SC VI.5. This condition does not apply if it is demonstrated that the potential sulfur emissions do not exceed 26 ng SO₂/Joules (0.060 lb SO₂/MMBTU) per MMBTU heat input pursuant to 40 CFR 60.4365. The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.4370)**
7. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit for FGCHP. This information shall include, but shall not be limited to the following:
 - a. Compliance tests and any testing required under the special conditions of this permit;
 - b. Monitoring data including continuous parameter monitoring system data;
 - c. Verification of heat input capacity;
 - d. Identification, type, and amount of fuel combusted on a calendar month basis;
 - e. Gross energy output on a calendar month basis;
 - f. All records required by 40 CFR 60.7;
 - g. Records of the duration of all dates and times of startup, shutdown, and malfunction events;
 - h. Records of the hours of operation at temperatures less than 0°F;
 - i. Records of the standard cubic feet of natural gas burned per month and 12-month rolling time period while operating EU-DB in fresh air firing mode;
 - j. Records of total hours of operation of FGCHP;
 - k. Records of the annual capacity factor of EU-DB in fresh air firing mode;
 - l. All calculations necessary to show compliance with the limits contained in this permit.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7(f).² **(R 336.1205(1), R 336.1225, R 336.1331, R 336.1702(a), R 336.1912, 40 CFR 52.21(c) & (d), 40 CFR 60.7(f), 40 CFR 60.4345)**

8. If the permittee installs a device to monitor and record the NO_x emissions for FGCHP on a continuous basis, the permittee shall install, calibrate, maintain, and operate in a satisfactory manner the monitoring device according to the procedures outlined in Appendix 3 (NO_x and CO₂/O₂ Monitoring CEMS Requirements) and 40 CFR 60.48b(b)(1), (c), (d), (e), (f).² **(R 336.1205(1), 40 CFR 60.4335(b), 40 CFR 60.4345)**
9. If the permittee installs a device to monitor and record the NO_x emissions for FGCHP on a continuous basis, the permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the flue gas oxygen concentration for FGCHP on a continuous basis and according to the procedures outlined in Appendix 3 (NO_x and CO₂/O₂ Monitoring CEMS Requirements) and 40 CFR 60.48.² **(R 336.1205(1), 40 CFR 60.4335(b), 40 CFR 60.4345)**

See Appendix 3

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports including RATA reports, if applicable, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. If FGCHP contains a continuous parameter monitoring system to determine continuous compliance with the NO_x emission limits pursuant to SC VI.4, the permittee shall submit excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) and 40 CFR 60.4380(c). An excess emission is a 4-hour rolling operating hour average for the turbine in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the monitoring plan. Monitor downtime is any turbine operating hour in which any of the required parametric data are either not recorded or invalid. All reports must be postmarked by the 30th day following the end of each 6-month period.² **(40 CFR 60.4375(a), 40 CFR 60.4380(c), 40 CFR 60.4395)**
6. If the permittee is required to monitor the sulfur content in the fuel pursuant to SC VI.5 and 40 CFR 60.4360, the permittee shall submit excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) and 60.4385. An excess emission is each turbine operating hour beginning on the date and hour that any sample shows an exceedance in the applicable sulfur limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. Monitor downtime begins when a required sample is not taken by its due date or the date and hour that invalid results are obtained. Monitor downtime ends on the date and hour of the next valid sample. All reports must be postmarked by the 30th day following the end of each 6-month period.² **(40 CFR 60.4375(a), 40 CFR 60.4385, 40 CFR 60.4395)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCHP	54 ²	100 ²	R 336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and KKKK, as they apply to FGCHP.² **(40 CFR Part 60, Subparts A and KKKK)**
2. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Db, as they apply to EU-DB. **(40 CFR Part 60, Subparts A and Db)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGNSPSVV FLEXIBLE GROUP CONDITIONS

DESCRIPTION

All pumps, valves, and pressure relief devices in light/heavy liquid service; all valves and pressure relief devices in gas/vapor service; each sampling connection; and each open-ended valve or line and all associated closed vent systems and control devices that commenced operation after January 5, 1981, and on or before November 7, 2006. (PTI 120-05H)

Emission Units: EU-190PROOFCOND, EU-200PROOFCOND, EU-BEERCOLUMN, EU-BEERWELL, EU-CENTRIFUGE1, EU-CENTRIFUGE2, EU-CENTRIFUGE3, EU-CENTRIFUGE4, EU-FERMENTER1, EU-FERMENTER2, EU-FERMENTER3, EU-FERMENTER6, EU-FERMENTER7, EU-RECTIFIER, EU-SIDESTRIPPER, EU-YEASTTANK, EU-YEASTTANK2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and VV, as they apply to the equipment in FGNSPSVV.² **(40 CFR Part 60, Subparts A and VV)**
2. The permittee shall operate each pressure relief device in gas/vapor service with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485(c), except during pressure releases and as provided in 40 CFR 60.482-4(c) and (d). After each pressure release, the permittee shall return the pressure relief device to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than five calendar days after the pressure release, except as provided in 40 CFR 60.482-9. No later than five calendar days after the pressure release, the permittee shall monitor the pressure relief device to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background.² **(40 CFR 60.482-4(a) and (b))**
3. The permittee shall design and operate vapor recovery systems (for example, condensers and absorbers) used to comply with 40 CFR Part 60, Subpart VV to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.² **(40 CFR 60.482-10(b))**
4. The permittee shall design and operate enclosed combustion devices used to comply with 40 CFR Part 60, Subpart VV to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to three percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.² **(40 CFR 60.482-10(c))**

5. The permittee shall, if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, follow either one of the following procedures:² **(40 CFR 60.482-8(a))**
 - a. Monitor the equipment within five (5) days by the method specified in 40 CFR 60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.² **(40 CFR 60.482-8(a)(1))**
 - i. When a leak is detected, the permittee shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9. The first attempt at repair shall be made no later than five calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described in 40 CFR 60.482-7(e).² **(40 CFR 60.482-8(b) through (d))**
 - b. Eliminate the visual, audible, olfactory, or other indication of a potential leak.² **(40 CFR 60.482-8(a)(2))**
6. The permittee may delay repair of equipment for which leaks have been detected if:² **(40 CFR 60.482-9)**
 - a. repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.² **(40 CFR 60.482-9(a))**
 - b. the equipment is isolated from the process and does not remain in VOC service.² **(40 CFR 60.482-9(b))**
 - c. the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and, when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10.² **(40 CFR 60.482-9(c))**
 - d. for pumps, repair requires the use of a dual mechanical seal system that includes a barrier fluid system and repair is completed as soon as practicable, but not later than six months after the leak was detected.² **(40 CFR 60.482-9(d))**

Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.² **(40 CFR 60.482-9(e))**

7. The permittee shall repair leaks of a closed vent system, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, as soon as practicable except as provided below. A first attempt at repair shall be made no later than five calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected.² **(40 CFR 60.482-10(g))**
 - a. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.² **(40 CFR 60.482-10(h))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip each sampling connection system with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-5(c). Gases displaced during filling of the sample container are not required to be collected or captured. Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5(b).² **(40 CFR 60.482-5)**
2. The permittee shall equip each open-ended valve or line with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c), 40 CFR 60.482-6(d), or 40 CFR 60.482-6(e), which shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. In addition, the permittee shall ensure that:² **(40 CFR 60.482-6)**
 - a. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.² **(40 CFR 60.482-6(b))**

- b. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 61.482-6(a) at all other times.² **(40 CFR 60.482-6(c))**
3. The permittee shall operate closed vent systems and control devices used to comply with 40 CFR 60 subpart VV at all times when emissions may be vented to them.² **(40 CFR 60.482-10(m))**
4. The permittee shall, when each leak is detected as specified in 40 CFR 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, do the following:
 - a. Attach a weatherproof and readily visible identification, marked with the equipment identification number, to the leaking equipment. The identification on a valve may be removed after it has been monitored for two successive months as specified in 40 CFR 60.482-7(c) and no leak has been detected during those two months. The identification on equipment except on a valve, may be removed after it has been repaired.² **(40 CFR 60.486(b))**
 - b. Record the following information in a log that and shall be kept for five years in a readily accessible location:² **(40 CFR 60.486(c))**
 - i. The instrument and operator identification numbers and the equipment identification number.
 - ii. The date the leak was detected and the dates of each attempt to repair the leak.
 - iii. Repair methods applied in each attempt to repair the leak.
 - iv. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.
 - v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - vi. The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - vii).The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - viii. Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - ix. The date of successful repair of the leak.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Upon request of the district supervisor, the permittee shall demonstrate compliance with the requirements of 40 CFR Part 60, Subparts A and VV. All required testing shall be at owner's expense. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Performance testing procedures shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60, Appendix A. The final plan must be approved by the AQD prior to testing. Compliance with 40 CFR 60.482-1 through 40 CFR 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2 to 40 CFR 60.482-10 if it is identified as required in 40 CFR 60.486(e)(5).² **(R 336.1225, R 336.1702(b), 40 CFR Part 60, Subparts A and VV, 40 CFR 60.482-1, 40 CFR 60.485)**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor each pump in light liquid service as follows:

- a. Check, by visual inspection, each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR 60.482-2(g). If there are indications of liquids dripping from the pump seal, a leak is detected.² **(40 CFR 60.482-2(a)(2) and (b)(2))**
- b. Monitor monthly to detect leaks by the methods specified in 40 CFR 60.485(b), except as provided in 40 CFR 60.482-1(c) and 40 CFR 60.482-2(d), (e), (f), and (g). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.² **(40 CFR 60.482-2(a)(1) and (b)(1))**

When a leak is detected, the permittee shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Sec. 60.482-9. A first attempt at repair shall be made no later than five calendar days after each leak is detected.² **(40 CFR 60.482-2(c))**

2. The permittee shall monitor each valve in gas/vapor service and in light liquid service monthly to detect leaks by the methods specified in 40 CFR 60.485(b) and shall comply with the following, except as provided in 40 CFR 60.483-1, 2, and 40 CFR 60.482-1(c):² **(40 CFR 60.482-7)**
 - a. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.² **(40 CFR 60.482-7(b))**
 - b. Any valve for which a leak is not detected for two successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.² **(40 CFR 60.482-7(c))**
 - c. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9. A first attempt at repair shall be made no later than five calendar days after each leak is detected.² **(40 CFR 60.482-7(d))**
 - d. First attempts at repair include, but are not limited to, the following best practices where practicable:² **(40 CFR 60.482-7(e))**
 - i. Tightening of bonnet bolts;
 - ii. Replacement of bonnet bolts;
 - iii. Tightening of packing gland nuts;
 - iv. Injection of lubricant into lubricated packing.
 - e. Any valve that is designated, as described in 40 CFR 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monthly monitoring if the valve has no external actuating mechanism in contact with the process fluid, is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 60.485(c), and is tested for compliance with the 500 ppm above background instrument reading initially upon designation, annually, and at other times requested by the ADQ District Supervisor.² **(40 CFR 60.482-7(f))**
 - f. Any valve that is designated, as described in 40 CFR 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the monthly monitoring if the permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of performing monthly monitoring, and the permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.² **(40 CFR 60.482-7(g))**
 - g. Any valve that is designated, as described in 40 CFR 60.486(f)(2), as a difficult-to-monitor valve is exempt from the monthly monitoring if:² **(40 CFR 60.482-7(g))**
 - i. the permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than two meters above a support surface,
 - ii. the process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
 - iii. the permittee follows a written plan that requires monitoring of the valve at least once per calendar year.
3. The permittee shall monitor control devices used to comply with 40 CFR Part 60, Subpart VV to ensure that they are operated and maintained in conformance with their designs.² **(40 CFR 60.482-10(e))**

4. The permittee shall inspect each closed vent system according to the procedures and schedule specified in 40 CFR 60.482-10(f), except as follows:² **(40 CFR 60.482-10(f))**
 - a. The vapor collection system or closed vent system is operated under a vacuum.² **(40 CFR 60.482-10(i))**
 - b. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(1), as unsafe to inspect are exempt from the inspection requirements if they comply with the following:² **(40 CFR 60.482-10(j))**
 - i. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger; and
 - ii. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
 - c. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10(l)(2), as difficult to inspect are exempt from the inspection requirements if they comply with the following:² **(40 CFR 60.482-10(k))**
 - i. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two meters above a support surface; and
 - ii. The process unit within which the closed vent system is located becomes an affected facility through 40 CFR 60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
 - iii. The permittee has a written plan that requires inspection of the equipment at least once every five years. A closed vent system is exempt from inspection if it is operated under a vacuum.
5. The permittee shall record the following information:² **(40 CFR 60.482-10(l))**
 - a. Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
 - b. Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
 - c. For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486(c).
 - d. For each inspection conducted in accordance with 40 CFR 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
 - e. For each visual inspection conducted in accordance with paragraph 40 CFR 60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
6. The permittee shall record the following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10. This information shall be kept in a readily accessible location:² **(40 CFR 60.486(d))**
 - a. Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - b. The dates and descriptions of any changes in the design specifications.
 - c. A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - d. Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

- e. Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5.
7. The permittee shall record the following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1 to 60.482-10. This information shall be kept in a readily accessible location:² **(40 CFR 40.486(e))**
 - a. A list of identification numbers for equipment subject to the requirements of 40 CFR Part 60, Subpart VV.
 - b. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2(e), 60.482-3(i) and 60.482-7(f). The designation of this equipment shall be signed by the permittee.
 - c. A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4.
 - d. The dates of each compliance test as required in 40 CFR 60.482-2(i), 60.482-3(i), 60.482-4, and 60.482-7(f), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test.
 - e. A list of identification numbers for equipment in vacuum service.
8. The permittee shall record the following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7(g) and (h) and to all pumps subject to the requirements of 40 CFR 60.482-2(g). This information shall be kept in a readily accessible location:² **(40 CFR 40.486(f))**
 - a. A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - b. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
9. The permittee shall record a schedule of monitoring and the percent of valves found leaking during each monitoring period for valves complying with Sec. 60.483-2.² **(40 CFR 40.486(g))**
10. The permittee shall record the design criterion required in 40 CFR 60.482-2(d)(5) and 60.482-3(e)(2) and an explanation of the design criterion and any changes to this criterion and the reasons for the changes. This information shall be kept in a readily accessible location.² **(40 CFR 60.486(h))**
11. The permittee shall record the following information for use in determining exemptions as provided in 40 CFR 60.480(d). This information shall be kept in a readily accessible location:² **(40 CFR 60.486(i))**
 - a. An analysis demonstrating the design capacity of the affected facility,
 - b. A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
 - c. An analysis demonstrating that equipment is not in VOC service.
12. The permittee shall record information and data used to demonstrate that a piece of equipment is not in VOC service. This information shall be kept in a readily accessible location.² **(40 CFR 60.486(j))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The permittee shall submit reports as required to comply with the federal NSPS as specified in 40 CFR Part 60, Subparts A and VV. Information required to be submitted to the Administrator shall be submitted to the AQD District Supervisor in an acceptable format within 30 days following the end of the semiannual period in which the data were collected. Information required to be submitted includes semiannual reports, beginning six months after the initial startup date. The initial semiannual report shall include the information listed in 40 CFR 60.487(b) and all semiannual reports shall include the information listed in 40 CFR 60.487(c). The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.487)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGNSPSVVa FLEXIBLE GROUP CONDITIONS

DESCRIPTION

All pumps, valves, and pressure relief devices in light liquid and heavy liquid service; all valves and pressure relief devices in gas/vapor service; each sampling connection; and each open ended valve or line and all associated closed vent systems and control devices for which construction, reconstruction, or modification commenced after November 7, 2006. (PTI 144-15C)

Emission Units: EU-190PROOFCOND2, EU-BEERCOLUMN2, EU-CENTRIFUGE, EU-CENTRIFUGE6, EU-CENTRIFUGE7, EU-CENTRIFUGE8, EU-FERMENTER4, EU-FERMENTER5, EU-FERMENTER8, EU-FERMENTER9, EU-FERMENTER10, EU-RECTIFIER2, EU-SIDESTRIPPER2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and VVa, as they apply to the equipment in FGNSPSVVa.² **(40 CFR Part 60, Subparts A and VVa)**
2. The permittee shall operate each pressure relief device in gas/vapor service with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR 60.485a(c), except during pressure releases and as provided in 40 CFR 60.482(4)(a),(c), and (d). After each pressure release, the permittee shall return the pressure relief device to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than five calendar days after the pressure release, except as provided in 40 CFR 60.482(9)a. No later than five calendar days after the pressure release, the permittee shall monitor the pressure relief device to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background.² **(40 CFR 60.482-4a(a) and (b))**
3. The permittee shall design and operate vapor recovery systems (for example, condensers and absorbers) used to comply with 40 CFR Part 60, Subpart VVa to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.² **(40 CFR 60.482-10a(b))**
4. The permittee shall design and operate enclosed combustion devices used to comply with 40 CFR Part 60, Subpart VVa to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to three percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.² **(40 CFR 60.482-10a(c))**

5. The permittee shall, if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, follow either one of the following procedures:² **(40 CFR 60.482-8a(a))**:
 - a. Monitor the equipment within five (5) days by the method specified in 40 CFR 60.485a(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.² **(40 CFR 60.482-8a(b))**
 - i. When a leak is detected, the permittee shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. The first attempt at the repair shall be made no later than five calendar days after each leak is detected. First attempts at repair include, but are not limited to, the best practices described in 40 CFR 60.482-2a(c)(2) and 40 CFR 60.482-7a(e).² **(40 CFR 60.482-8(b) through (d))**
 - b. Eliminate the visual, audible, olfactory, or other indication of a potential leak.² **(40 CFR 60.482-8a(a)(2))**
6. The permittee may delay repair of equipment for which leaks have been detected if:² **(40 CFR 60.482-9a)**
 - a. Repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitor to verify repair must occur within 15 days after startup of the process unit.² **(40 CFR 60.482-9a(a))**
 - b. The equipment is isolated from the process and does not remain in VOC service.² **(40 CFR 60.482-9a(b))**
 - c. For valve and connector repair, the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair and, when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10a.² **(40 CFR 60.482-9a(c))**
 - d. For pumps, repair requires the use of a dual mechanical seal system that includes a barrier fluid system and repair is completed as soon as practicable, but not later than six months after the leak was detected.² **(40 CFR 60.482-9a(d))**

Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six months after the first process unit shutdown.² **(40 CFR 60.482-9a(e))**

When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements of two consecutive monthly monitoring instrument readings are below the leak definition.² **(40 CFR 60.482-9a(f))**

7. The permittee shall repair leaks of a closed vent system, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, as soon as practicable except as provided below. A first attempt at repair shall be made no later than five calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected.² **(40 CFR 60.482-10a(g))**:
 - a. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.² **(40 CFR 60.482-10a(h))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip each sampling connection system with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR 60.482-1a(c) and 40 CFR 60.482-5a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the requirements specified in 40 CFR 60.482-5a(b).² **(40 CFR 60.482-5a)**

2. The permittee shall equip each open-ended valve or line with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1a(c), 40 CFR 60.482-6a(d), or 40 CFR 60.482-6a(e), which shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. In addition, the permittee shall ensure that:² **(40 CFR 60.482-6a)**
 - a. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.² **(40 CFR 60.482-6a(b))**
 - b. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR 61.482-6a(a) at all other times.² **(40 CFR 60.482-6a(c))**
3. The permittee shall operate closed vent systems and control devices used to comply with 40 CFR Part 60, Subpart VVa at all times when emissions may be vented to them.² **(40 CFR 60.482-10a(m))**
4. The permittee shall, when each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, do the following:
 - a. Attach a weatherproof and readily visible identification, marked with the equipment identification number, to the leaking equipment. The identification on a valve may be removed after it has been monitored for two successive months as specified in 40 CFR 60.482-7a(c) and no leak has been detected during those two months. The identification on equipment, except on a valve or connector, may be removed after it has been repaired. The identification on a connector may be removed after it has been monitored as specified in 60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring.² **(40 CFR 60.486a(b))**
 - b. Record the following information in a log that and shall be kept for two years in a readily accessible location:² **(40 CFR 60.486a(c))**:
 - i. The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.
 - ii. The date the leak was detected and the dates of each attempt to repair the leak.
 - iii. Repair methods applied in each attempt to repair the leak.
 - iv. Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR Part 60 at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping.
 - v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - vi. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - vii. The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - viii. Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - ix. The date of successful repair of the leak.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. Upon request of the district supervisor, the permittee shall demonstrate compliance with the requirements of 40 CFR Part 60, Subparts A and VVa. All required testing shall be at owner's expense. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Performance testing procedures shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60, Appendix A. The final plan must be approved by the AQD prior to testing. Compliance with 40 CFR 60.482-1a through 40 CFR 60.482-11a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a. Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a

to 40 CFR 60.482-11a if it is identified as required in 40 CFR 60.486a(e)(5).² **(R 336.1225, R 336.1702(b), 40 CFR Part 60, Subparts A and VVa, 40 CFR 60.482-1a, 40 CFR 60.485a)**

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor each pump in light liquid service as follows:
 - a. Check, by visual inspection, each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR 60.482-1a(f). If there are indications of liquids dripping from the pump seal, a leak is detected.² **(40 CFR 60.482-2a(a)(2) and (b)(2))**
 - b. Monitor monthly to detect leaks by the methods specified in 40 CFR 60.485a(b), except as provided in 40 CFR 60.482-1a(c), 40 CFT 60.482-1a(c), and 40 CFR 60.482-2a(d), (e), and (f). If instrument readings indicating the detection of a leak are:² **(40 CFR 60.482-2a(a)(1) and (b)(1))**
 - i. 5,000 ppm or greater for pumps handling polymerizing monomers.
 - ii. 2,000 ppm or greater for all other pumps.

When a leak is detected, the permittee shall repair it as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than five calendar days after each leak is detected.² **(40 CFR 60.482-2a(c))**

2. The permittee shall monitor each valve in gas/vapor service and in light liquid service monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) and shall comply with the following, except as provided in 40 CFR 60.482-1a(c), 40 CFR 60.482-1a(f), 40 CFR 60.483-1a(c), and 40 CFR 60.483-2a. A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(2)(i) or (ii), except for a valve that replaces a leaking valve or as provided in 40 CFR 60.482-7a(f), (g), (h), 60.481-1a(c), 60.483-1a, and 60.483-2a.² **(40 CFR 60.482-7a)**
 - a. If an instrument reading of 500 ppm or greater is measured, a leak is detected.² **(40 CFR 60.482-7a(b))**
 - b. Any valve for which a leak is not detected for two successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. Alternatively, the owner or operator may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The owner must keep records of the valves assigned to each subgroup. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months.² **(40 CFR 60.482-7(c))**
 - c. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9a. A first attempt at repair shall be made no later than five calendar days after each leak is detected.² **(40 CFR 60.482-7a(d))**
 - d. First attempts at repair include, but are not limited to, the following best practices where practicable:² **(40 CFR 60.482-7a(e))**
 - i. Tightening of bonnet bolts;
 - ii. Replacement of bonnet bolts;
 - iii. Tightening of packing gland nuts;
 - iv. Injection of lubricant into lubricated packing.
 - e. Any valve that is designated, as described in 40 CFR 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the monthly monitoring if the valve has no external actuating mechanism in contact with the process fluid, is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 60.485a(c), and is

tested for compliance with the 500 ppm above background instrument reading initially upon designation, annually, and at other times requested by the ADQ District Supervisor.² **(40 CFR 60.482-7(f))**

- f. Any valve that is designated, as described in 40 CFR 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the monthly monitoring if the permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of performing monthly monitoring and the permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.² **(40 CFR 60.482-7a(g))**
- g. Any valve that is designated, as described in 40 CFR 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the monthly monitoring if it complies with all of the following:² **(40 CFR 60.482-7a(g))**
 - i. The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than two meters above a support surface,
 - ii. The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 and was constructed on or before January 5, 1981, or has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator, and
 - iii. The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.
3. The permittee shall monitor control devices used to comply with 40 CFR Part 60, Subpart VVa to ensure that they are operated and maintained in conformance with their designs.² **(40 CFR 60.482-10a(e))**
4. The permittee shall inspect each closed vent system according to the procedures and schedule specified in 40 CFR 60.482-10a(f), except as follows:² **(40 CFR 60.482-10a(f))**
 - a. The vapor collection system or closed vent system is operated under a vacuum.² **(40 CFR 60.482-10a(i))**
 - b. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(1), as unsafe to inspect are exempt from the inspection requirements if they comply with the following:² **(40 CFR 60.482-10a(j))**
 - i. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger; and
 - ii. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
 - c. Any parts of the closed vent system that are designated, as described in 40 CFR 60.482-10a(l)(2), as difficult to inspect are exempt from the inspection requirements if they comply with all of the following:² **(40 CFR 60.482-10a(k))**
 - i. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two meters above a support surface.
 - ii. The process unit within which the closed vent system is located becomes an affected facility through 40 CFR 60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect.
 - iii. The permittee has a written plan that requires inspection of the equipment at least once every five years. A closed vent system is exempt from inspection if it is operated under a vacuum.
5. The permittee shall record the following information:² **(40 CFR 60.482-10a(l))**
 - a. Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
 - b. Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
 - c. For each inspection during which a leak is detected, a record of the information specified in 40 CFR 60.486a(c).

- d. For each inspection conducted in accordance with 40 CFR 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
 - e. For each visual inspection conducted in accordance with paragraph 40 CFR 60.482-10a(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
6. The permittee shall record the following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a. This information shall be kept in a readily accessible location:² **(40 CFR 60.486a(d))**
- a. Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - b. The dates and descriptions of any changes in the design specifications.
 - c. A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - d. Periods when the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.
 - e. Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2, 60.482-3, 60.482-4, and 60.482-5.
7. The permittee shall record the following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-11a. This information shall be kept in a readily accessible location.² **(40 CFR 40.486a(e))**
- a. A list of identification numbers for equipment subject to the requirements of 40 CFR Part 60, Subpart VVa.
 - b. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), 60.482-3a(i) and 60.482-7a(f). The designation of this equipment shall be signed by the owner or operator. Alternatively, the owner or operator may establish a mechanism with their permitting authority that satisfies this requirement.
 - c. A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4a.
 - d. The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f), the background level measured during each compliance test, and the maximum instrument reading measured at the equipment during each compliance test.
 - e. A list of identification numbers for equipment in vacuum service.
 - f. A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hours per year in accordance with 60.481-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hours per year.
 - g. The dates and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
 - h. Records of the information specified in 40 CFR 60.486a(e)(8)(i) through 40 CFR 60.486a(e)(8)(vi) for monitor instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of Appendix A-7 of 40 CFR 60, and 60.485a(b).
 - i. The connector monitoring schedule for each process unit as specified in 40 CFR 60.482-11a(b)(3)(v).
 - j. Records of each release from a pressure relief device subject to 40 CFR 60.482-4a.

8. The permittee shall record the following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482-2a(g), and all connectors subject to the requirements of 40 CFR 60.482-11a(e). This information shall be kept in a readily accessible location.² **(40 CFR 40.486a(f))**
 - a. A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - b. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
9. The permittee shall record a schedule of monitoring and the percent of valves found leaking during each monitoring period for valves complying with Sec. 60.483-2a.² **(40 CFR 40.486a(g))**
10. The permittee shall record the design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2), an explanation of the design criterion, any changes to this criterion, and the reasons for the changes. This information shall be kept in a readily accessible location.² **(40 CFR 60.486a(h))**
11. The permittee shall record the following information for use in determining exemptions as provided in 40 CFR 60.480a(d). This information shall be kept in a readily accessible location.² **(40 CFR 60.486a(i))**:
 - a. An analysis demonstrating the design capacity of the affected facility,
 - b. A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
 - c. An analysis demonstrating that equipment is not in VOC service.
12. The permittee shall record information and data used to demonstrate that a piece of equipment is not in VOC service. This information shall be kept in a readily accessible location.² **(40 CFR 60.486a(j))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The permittee shall submit reports as required to comply with the federal NSPS as specified in 40 CFR Part 60, Subparts A and VVa. Information required to be submitted to the Administrator shall be submitted to the AQD District Supervisor in an acceptable format within 30 days following the end of the semiannual period in which the data were collected. Information required to be submitted includes semiannual reports, beginning six months after the initial startup date. The initial semiannual report shall include the information listed in 40 CFR 60.487a(b) and all semiannual reports shall include the information listed in 40 CFR 60.487a(c). The permittee shall keep all records on file and make them available to the Department upon request.² **(40 CFR 60.487a)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGFIREPUMP
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

A 300 HP diesel fired emergency fire water pump installed August.

Emission Units: EU-DIESELPUMP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	7.8 g/HP-hr	Hourly	EU-DIESELPUMP	SC V.1 SC VI.2	40 CFR 60.4205, Table 4 of 40 CFR Part 60, Subpart IIII
2. CO	2.6 g/HP-hr	Hourly	EU-DIESELPUMP	SC V.1 SC VI.2	40 CFR 60.4205, Table 4 of 40 CFR Part 60, Subpart IIII
3. PM	0.4 g/HP-hr	Hourly	EU-DIESELPUMP	SC V.1 SC VI.2	40 CFR 60.4205, Table 4 of 40 CFR Part 60, Subpart IIII

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in each diesel pump in FGFIREPUMPS with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 60.4207, 40 CFR 1090.305)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee may operate each diesel pump in FGFIREPUMPS for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4211(f)(2))**

2. The permittee may operate each diesel pump in FGFIREPUMPS up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted as part of the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart IIII, for the same model year, the permittee shall meet the following requirements for each diesel pump in FGFIREPUMPS:
 - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
 - b. Change only those emission-related settings that are permitted by the manufacturer, and
 - c. Meet the requirements as specified in 40 CFR 1068, as they apply to the engine.If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211(a), 40 CFR 60.4211(b), 40 CFR 60.4211(c))**
4. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for each diesel pump in FGFIREPUMPS and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each diesel pump in FGFIREPUMPS with non-resettable hour meters to track the operating hours. **(40 CFR 60.4209)**
2. The maximum rated power output of EU-DIESELPUMP shall not exceed 300 HP (224 kW), as certified by the equipment manufacturer. **(40 CFR 60.4202, 40 CFR 60.4205)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If the any diesel pump in FGFIREPUMP is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
 - b. If a performance test is required, the performance tests shall be conducted according 40 CFR 60.4212.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4211(g)(2), 40 CFR 60.4212)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(40 CFR Part 60, Subpart IIII)**
2. The permittee shall keep, in a satisfactory manner, the following records for each diesel pump in FGFIREPUMP:
 - a. For each certified engine: The permittee shall keep records of the manufacturer certification documentation.
 - b. For each uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each diesel pump in FGFIREPUMP:
 - a. For each certified engine: The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.3.
 - b. For each uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.4, and maintenance activities.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

4. The permittee shall monitor and record, the total hours of operation for each diesel pump in FGFIREPUMP on a monthly and 12-month rolling time period basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each diesel pump in FGFIREPUMP, on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each diesel pump in FGFIREPUMP, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4211, 40 CFR 60.4214)**
5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGFIREPUMPS, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(40 CFR 60.4207(b), 40 CFR 1090.305)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

5. The permittee shall submit a notification specifying whether each diesel pump of FGFIREPUMPS will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(40 CFR Part 60, Subpart III)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal National Emission Standards for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to the equipment in FGFIREPUMPS. **(40 CFR Part 63, Subparts A and ZZZZ)**
2. The permittee shall comply with all provisions of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to the equipment in FGFIREPUMPS. **(40 CFR Part 60, Subparts A and IIII)**

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. (R 336.1213(4)(a), R 336.1119(a)(ii))

Appendix 3. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FGOXID, FGOXID2, EU-GRAINRECEIVE, EU-GRAINDRY, EU-DDGSLOADOUT, FGC-20, FGCORNBINS, FGC-30, and FGMILL2.

1. Visible emissions shall be recorded as “observed” or “not observed.”
2. If visible emissions are observed, the maintenance supervisor shall be notified immediately and steps 2 through 6 must be followed.
3. A determination of needed repairs and/or maintenance, if applicable, shall be made within 24 hours and recorded.
4. If necessary, repair and/or maintenance operations shall be performed within 48 hours of discovery.
5. Routine maintenance shall be performed according to the manufacturer’s recommendations.
6. A six-minute average, Method 9 reading shall be performed to confirm compliance with the visible emission limit.

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FGOXID and FGCHP.

NO_x and CO₂/O₂ Monitoring Continuous Emission Monitoring System (CEMS) Requirements

1. The permittee shall maintain a copy of the Monitoring Plan. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.
2. The permittee shall maintain a copy of the final report demonstrating the CEMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table.

Pollutant	Applicable PS
NO _x	2
CO ₂ / O ₂	3

3. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
4. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2 and 3 of Appendix B, 40 CFR Part 60.
5. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F)
6. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

- a. A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause, and corrective actions of all occurrences during the reporting period.
- b. A report of all periods of CEMS downtime and corrective action.
- c. A report of the total operating time of each boiler during the reporting period.
- d. A report of any periods that the CEMS exceeds the instrument range.

If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

Appendix 4. Recordkeeping

Specific recordkeeping requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 5. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B8570-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B8570-2015b is being reissued as Source-Wide PTI No. MI-PTI-B8570-2023a.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
PTI 119-19B	202100075*	Changes emission limits & M/M/R for FGCORNBINS	EU-DAYBIN3, FGC-20, FGENCLOSEDCONV, FGC-30
PTI 144-15E	202100075*	Increases the PM10 and PM2.5 emission limits for FGOXID (thermal oxidizer C-10)	FGOXID, FGNSPSVV (in name only)
PTI 144-15G	202100075*	EU-INTERNALOP replaces conveyors, & updates monitoring to FGFERM	FGCHP, EU-INTERNALOP, EU-GRAINDRY, FGFERM, FGPURGE
PTI 3-21	202100075*	Increases throughput to EU-DENATURANT & EUs for EU-DENATTANKS	FGFACILITY
NA	201900179	Change facility name to The Andersons Marathon Holdings, LLC	NA

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-B8570-2023.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
PTI 119-19C	022300142 / December 15, 2023	To incorporate PTI 119-19C which was to pull EU-DIESELPUMP2 from PTI 144-15C that corrected errors in emission unit description, removed redacted federal regulation and updated conditions to match current formats. Additionally, moved EU-DAYBIN1 into correct Flexible Group FGC-30. Associated emission units and flexible groups were carried forward in the PTI.	EU-GRAINRECEIVE EU-TRUCKPIT EU-REDIRECTCONV EU-BINEMPTCONV1 EU-BINEMPTCONV2 EU-RECEIVINGCONV EU-CORNELEV1 EU-CORNELEV2 EU-SCALPER1 EU-SCALPER2 EU-TRANSCONV1 EU-TRANSCONV2 EU-CORNBIN1 EU-CORNBIN2 EU-DAYBIN1 EU-DAYBIN2 EU-DAYBIN3 EU-MILL1 EU-MILL2 EU-MILL3 EU-MILL4 EU-FEED EU-DIESELPUMP2 FGCORNBINS FGENCLOSEDCONV FGC-20 FGC-30 FGFIREPUMPS

Appendix 7. Emission Calculations

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

B. Other Reporting

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.

Appendix 9. Fugitive Dust Control Plan

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-GRAINRECEIVE, EU-INTERNALOP, EU-GRAINDRY, and FGC-20.

Grain Handling, Storage, and Drying - Plant and Roadways

I. Site Roadways/Plant Yard

- a. The dust on the site roadways/plant yard shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be done as often as necessary to meet all applicable emission limits.
- b. All paved roadways/plant yards shall be swept as needed between applications.
- c. Any material spillage on roads shall be cleaned up immediately.

II. Plant

- a. The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve. All transfer points shall be enclosed.

III. Grain Storage

- a. All outdoor storage of grain shall be covered.

IV. Truck Traffic

- a. On-site: Vehicles shall be loaded to prevent their contents from dropping, leaking, blowing, or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within six inches of the top of any side board, side panel or tail gate, otherwise, the truck shall be tarped.

V. AQD/EGLE Inspection

- a. The provisions and procedures of this plan are subject to adjustment if following an inspection and written notification the AQD finds the fugitive dust requirements and/or permitted emission limits are not being met.