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|  | **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY****AIR QUALITY DIVISION** |  |
| EFFECTIVE DATE: August 5, 2019REVISION DATE: December 13, 2022ISSUED TO**Michigan Sugar Company – Caro Factory**State Registration Number (SRN): B2875LOCATED AT819 Peninsular Street, Caro, Michigan 48723 |
|  |
| **RENEWABLE OPERATING PERMIT**Permit Number: MI-ROP-B2875-2019aExpiration Date: August 5, 2024Administratively Complete ROP Renewal Application Due Between February 5, 2023 and February 5, 2024This 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. |

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| **SOURCE-WIDE PERMIT TO INSTALL**Permit Number: MI-PTI-B2875-2019aThis 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 PTl 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

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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 are 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))**
	1. 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.
	2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
	3. Inspect, at reasonable times, any of the following:
		1. Any stationary source.
		2. Any emission unit.
		3. Any equipment, including monitoring and air pollution control equipment.
		4. Any work practices or operations regulated or required under the ROP.
	4. 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

1. 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)**
2. 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

1. 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))**
	1. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
	2. A limit specified by an applicable federal new source performance standard.

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

1. 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:
	1. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.1 **(R 336.1901(a))**
	2. Unreasonable interference with the comfortable enjoyment of life and property.1**(R 336.1901(b))**

## Testing/Sampling

1. 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)**
2. 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))**
3. 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

1. 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))**
	1. The date, location, time, and method of sampling or measurements.
	2. The dates the analyses of the samples were performed.
	3. The company or entity that performed the analyses of the samples.
	4. The analytical techniques or methods used.
	5. The results of the analyses.
	6. The related process operating conditions or parameters that existed at the time of sampling or measurement.
2. 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

1. 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 states 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))**
2. 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))**
3. 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))**
4. 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))**
	1. 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).
	2. 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.
	3. 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.
5. 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))**
	1. 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.
	2. 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.
6. 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))**
7. 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))**
8. 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

1. 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))**
	1. The applicable requirements are included and are specifically identified in the ROP.
	2. 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.

1. Nothing in this ROP shall alter or affect any of the following:
	1. 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))**
	2. 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))**
	3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
	4. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
2. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
	1. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
	2. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
	3. 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))**
	4. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
	5. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
3. 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

1. 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)**
2. 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))**
3. 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))**
4. 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

1. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
	1. 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))**
	2. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
	3. 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))**
	4. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

## Renewals

1. 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

1. 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.
2. 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

1. 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).
2. 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):
	1. June 21, 1999,
	2. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
	3. The date on which a regulated substance is first present above a threshold quantity in a process.
3. 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.
4. 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

1. 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)

1. 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))**
2. 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)**
3. 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)**
4. 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.

# 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** |
| --- | --- | --- | --- |
| EUPACKAGEBOILER3 | A No. 6 fuel oil or natural gas-fired boiler, rated at 115 MMBTU per hour heat input, for 75,000 pounds of steam production per hour used in a sugar processing facility. Some of the steam generated is used to produce power. This emission unit is subject to 40 CFR Part 63, Subpart DDDDD. (PTI No. 212-74)  | 05/28/1974 | FG635DEXGAS1BOILER |
| EUBOILER4 | A relocated natural gas-fired boiler, rated at 146.5 MMBTU per hour heat input, for 120,000 pounds of steam production per hour for the processing of sugar beets and for heat to the facility. The boiler is equipped with low NOx burners and was originally constructed in 1990. This emission unit is subject to 40 CFR Part 60, Subpart Db and 40 CFR Part 63, Subpart DDDDD. (PTI No. 44-14) | 09/12/2014 | FG635DEXGAS1BOILER |
| EUPULPDRYER | Natural gas fired rotary drier used to dry beet pulp. Equipped with a multiclone without fly ash reinjection and a flue gas recirculation system. This emission unit is subject to 40 CFR Part 64 (CAM). (PTI No. 56-22) | Pre-1967, 08/1986, 08/1989, 01/1993 | NA |
| EULIMEKILN1 | Vertical lime kiln used to produce CO2 and lime for beet sugar processing. (PTI No. 807-88) | 01/01/1911, 01/01/1989 | FG2KILNS |
| EULIMEKILN2 | Vertical lime kiln used to produce CO2 and lime for beet sugar processing. (PTI No. 807-88) | 01/01/1911, 01/01/1990 | FG2KILNS |

## EUPACKAGEBOILER3

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A No. 6 fuel oil or natural gas-fired boiler, rated at 115 MMBTU per hour heat input, for 75,000 pounds of steam production per hour used in a sugar processing facility. Some of the steam generated is used to produce power. This emission unit is subject to 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. (PTI No. 212-74)

**Flexible Group ID:** FG635DEXGAS1BOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. SO2 | 1.67 pounds per million BTUs of heat input2  | 24-hour period | EUPACKAGEBOILER3 | SC V.1 | **R 336.1401(1)** |

**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))**

1. For each delivery of fuel oil, the representative sulfur content analysis shall be either on file with the permittee or supplied by the vendor at time of delivery.  If fuel oil is fired in EUPACKAGEBOILER3, the permittee shall verify the vendor supplied sulfur content data at least once per campaign by conducting independent analysis in accordance with the Fuel Sampling Plan in Appendix 9, as may be amended with the approval of the District Supervisor. **(R 336.1213(3))**

**See Appendix 9**

**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 and record the results of a non-certified visible emissions check on
EUPACKAGEBOILER3 at least once per operating day when firing fuel oil. The visible emissions check shall verify the presence of any visible emissions and need not follow the procedures specified in USEPA
Method 9; therefore, multiple stacks may be observed simultaneously. The date, time, name of visible emissions observer, and whether any visible emissions were observed shall be recorded.  If any visible emissions are observed, the permittee shall immediately implement one of the following procedures:
**(R 336.1213(3), R 336.1301)**
2. If any visible emissions have been observed during the non-certified visible emissions check, the permittee shall perform and record the results of a 6-minute USEPA Method 9 visible emissions observation. If the results of the Method 9 visible emissions observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
3. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of any visible emissions.
4. Records of the non-certified visible emissions checks, Method 9 observations, and corrective actions that were taken shall be kept on file. **(R 336.1213(3))**
5. The permittee shall record the date, time, and duration that fuel oil is fired in EUPACKAGEBOILER3.
**(R 336.1213(3))**
6. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon: **(R 336.1213(3))**

a. The applicable % sulfur by weight;

b. BTU/lb or BTU/gallon;

c. The calculated pound per MMBTU sulfur adjusted to 18,000 BTU (Appendix 7).

**See Appendix 7**

**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 Dimensions****(inches)** | **Minimum Height Above Ground****(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SVPACKAGEBOILER3 | 1002 | 1452 | **R 336.1201(3)** |

**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).

## EUBOILER4

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A relocated natural gas-fired boiler, rated at 146.5 MMBTU per hour heat input, for 120,000 pounds of steam production per hour for the processing of sugar beets and for heat to the facility. The boiler is equipped with low NOx burners and was originally constructed in 1990. This emission unit is subject to 40 CFR Part 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, and 40 CFR Part 63, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. (PTI No. 44-14)

**Flexible Group ID:** FG635DEXGAS1BOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit\*\*** | **Time Period/ Operating****Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. NOx | 0.15 lb/MMBTU2 | 30-day average rolling time period | EUBOILER4 | SC VI.2 | **R 336.1205(1)(a) & (b),R 336.2801(ee), 40 CFR 60.44b(a)(1)** |
| 2. NOx | 96.3 tpy2 | 12-month rolling time period as determined at the end of each calendar month | EUBOILER4 | SC VI.2 and VI.5 | **R 336.1205(1)(a) & (b),R 336.2801(ee)** |
| 3. CO | 0.23 lb/MMBTU2 | Hourly\* | EUBOILER4 | SC V.1, FG635DEXGAS1BOILER SC V.4 | **R 336.1205(1)(a) & (b),R 336.2801(ee)** |
| 4. CO | 147.6 tpy2 | 12-month rolling time period as determined at the end of each calendar month | EUBOILER4 | SC VI.6 | **R 336.1205(1)(a) & (b),R 336.2801(ee)** |
| 5. GHGs as  CO2e | 75,138 tpyA, 2 | 12-month rolling time period as determined at the end of each calendar month | EUBOILER4 | SC VI.7 | **R 336.1205(1)(a) & (b),R 336.2801(ee)** |

\* If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

\*\* All limits include start-up, shutdown, and malfunction conditions.

A Short tons per year

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only natural gas in EUBOILER4.2  **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subparts A & Db)**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate EUBOILER4 unless a malfunction abatement plan (MAP) as described in
Rule 911(2), for EUBOILER4 operation, 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 O2 or CO2 operating ranges for varying loads, and any other appropriate operating variables, 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 45 days after such an event occurs. The permittee shall also amend the MAP within 45 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 336.1225, R 336.1331, R 336.1702(a), R 336.1911, 40 CFR 52.21(c) & (d))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The heat input capacity of EUBOILER4 shall not exceed a maximum of 146.5 MMBTU per hour.2 **(R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart Db)**

2. The permittee shall not operate EUBOILER4 unless the low NOx burners are installed, maintained, and operated in a satisfactory manner.2  **(R 336.1205(1)(a) & (b), 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 calendar daily natural gas usage rate when in operation for EUBOILER4 on a continuous basis.2 **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR 60.49b(d))**

4. The permittee shall install, calibrate, maintain, and operate, in a satisfactory manner, devices to monitor and record the NOx emissions, and oxygen (O2) content of the exhaust gas from EUBOILER4 on a continuous basis.2  **(R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR 60.48b)**

**See Appendix 3**

**V. TESTING/SAMPLING**

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

1. 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). **(R 336.1213(3), R 336.2001)**

**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.2  **(R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart Db)**

2. The permittee shall continuously monitor and record, in a satisfactory manner, the NOx emissions and the O2 content from the exhaust gas from EUBOILER4. The permittee shall operate each Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements, and reporting detailed in Appendix 3.A and shall use the CEMS data for determining compliance with SC I.1 and SC I.2.2 **(R 336.1205(1)(a) & (b), R 336.2801(ee), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart Db)**

3. The permittee shall keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis and a 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request.2  **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2801(ee), 40 CFR 52.21(c) & (d))**

4. The permittee shall calculate and keep, in a satisfactory manner, records of the monthly and 12-month rolling annual capacity factor for natural gas for EUBOILER4. The permittee shall keep all records on file and make them available to the Department upon request.2 **(40 CFR 60.49b(d))**

5. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total NOx emissions for EUBOILER4, as required by SC I.2. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205(1)(a) & (b), R 336.2801(ee))**

6. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO emissions for EUBOILER4, as required by SC I.4. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205(1)(a) & (b), R 336.2801(ee))**

7. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO2e emissions for EUBOILER4, as required by SC I.5. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205(1)(a) & (b), R 336.2801(ee))**

8. 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. 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;

c. Verification of heat input capacity required to show compliance with SC IV.1;

d. Identification, type, and the amounts of fuel combusted in EUBOILER4 on a calendar day basis;

e. All records required by 40 CFR 60.7 and 60.49b;

f. 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 Air Quality Division and shall be consistent with the requirements of 40 CFR 60.7(f).2 **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.1912, 40 CFR 52.21(c) & (d), 40 CFR 60.7(f), 40 CFR Part 60, Subpart Db)**

**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 orreceived 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))**

1. 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))**
2. The permittee shall submit all reports required by the federal Standards of Performance for New Stationary Sources, 40 CFR 60.49b, as applicable. The permittee shall submit these reports to the AQD District Supervisor within the time frames specified in 40 CFR 60.49b and/or 40 CFR 60.7.2 **(40 CFR 60.7, 40 CFR 60.49b(h) & (i))**

**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. SVBOILER4 | 1022 | 1502 | **R 336.1225,****40 CFR 52.21(c) & (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 EUBOILER4.2 **(40 CFR Part 60, Subparts A & 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).

## EUPULPDRYER

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Natural gas rotary drier used to dry beet pulp. Equipped with a multiclone without fly ash reinjection and a flue gas recirculation system. This emission unit is subject to 40 CFR Part 64 (CAM). (PTI No. 56-22)

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

Multiclone collector and flue gas recirculation.

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Particulate Matter (PM)
 | 0.10 pound per 1,000 pounds of exhaust gases2 | HourlyA | EUPULPDRYER | SC V.1, SC VI.2 | **R 336.1331(a)** |
| 1. PM
 | 27.7 pph2 | HourlyA | EUPULPDRYER | SC V.1, SC VI.2 | **R 336.1331(c)** |
| 1. PM
 | 65.3 tpy2 | 12-month rolling time period as determined at the end of each calendar month | EUPULPDRYER | SC VI.4 | **R 336.1205(1)(a)&(3)** |
| 1. PM10
 | 27.7 pph2 | HourlyA | EUPULPDRYER | SC V.1, SC VI.2 | **R 336.1205(1)(a)** |
| 1. PM10
 | 65.3 tpy2 | 12-month rolling time period as determined at the end of each calendar month | EUPULPDRYER | SC VI.4 | **R 336.1205(1)(a)&(3)** |

A If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate the EUPULPDRYER unless the multiclone collector and flue gas recirculation systems are installed, maintained, and operated in a satisfactory manner.2 **(R 336.1910)**

2. The permittee shall not operate the beet pulp drier for more than 4,715 hours per year.2 **(R 336.1201(3))**

3. The permittee shall not operate EUPULPDRYER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for EUPULPDRYER operation, 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;

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 45 days after such an event occurs. The permittee shall also amend the MAP within 45 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 336.1911)**

4. The permittee shall not operate the primary and auxiliary flue gas recirculation fans simultaneously.2 **(R 336.1201(3))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain the multiclone with instrumentation to continuously monitor the pressure drop across the multiclone. Proper operation shall be in accordance with a pressure drop range as specified in the MAP. **(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 verify PM and PM10 emission rates from EUPULPDRYER every 5 years from the previous test, by testing, at owner’s expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in table below.

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| PM | 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules |
| PM10 | 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 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.2 **(R 336.1205, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

**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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.2  **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d))**
2. The permittee shall continuously measure pressure drop across the multiclone with differential pressure instrumentation and record at least three times per shift with at least one hour between readings as an indicator of proper operation of the multiclone.2 **(R 336.1205(1)(a), R 336.1331, R 336.1910)**
3. The permittee shall keep a log of hours of operation of EUPULPDRYER using a method acceptable to the AQD District Supervisor.2 **(R 336.1205(1)(a) & (3))**
4. The permittee shall calculate and keep, in a satisfactory manner, monthly and 12-month rolling PM and PM10, mass emission records, as required by SC I.3 and SC I.5, for EUPULPDRYER. The PM calculations are based upon applicable emission factors, stack test results, maximum design parameters, and hours of operation. The PM10 calculations are based upon the following:

$$PM10 \left(tpy\right)=F\*PM(tpy)$$

Where F = the fraction of PM considered to be PM10; this value should be 90 percent unless otherwise approved by the District Supervisor.

The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d))**

1. The differential pressure instrumentation of the multiclone shall be calibrated once per year during shut-down of the pulp dryer. **(40 CFR 64.6(c)(1)(iii))**
2. An excursion for the differential pressure instrumentation of the multiclone is a departure from the indicator range of 2 to 11 inches of water pressure. **(40 CFR 64.6(c)(1)(i and ii), 40 CFR 64.6(c)(2))**
3. 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))**
4. 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 devices 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))**
5. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
6. 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 orreceived 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 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 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 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)**

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. SVDRYERSTACK
 | 962 | 1002 | **R 336.1201(3)** |

**IX. OTHER REQUIREMENT(S)**

1. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and, if necessary, submit a proposed modification of the 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))**

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

**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 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** |
| --- | --- | --- |
| FG2KILN | Vertical kilns fired with coke or anthracite coal for the production of carbon dioxide (CO2) and calcium oxide (lime) for purification of sugar juice. The lime is introduced into the sugar making process as milk of lime at the carbonation tanks. The CO2 is used for pH adjustment in the carbonation tanks. In order to have the appropriate amount of CO2 for the carbonation system, approximately 80% of the combustion gases from the lime kiln are directed to the carbonation tanks with approximately 20% directly discharged to the atmosphere. Each kiln is equipped with a booster fan on top. (PTI No. 807-88) | EULIMEKILN1, EULIMEKILN2 |
| FG635DEXGAS1BOILER | Relocated existing boilers and process heaters subject to 40 CFR Part 63, Subpart DDDDD in the units designed to burn Gas 1 subcategory. The subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition. These units must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i). (PTI No. 44-14) | EUBOILER4,EUPACKAGERBOILER3 |

## FG2KILNS

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Vertical kilns fired with coke or anthracite coal for the production of carbon dioxide (CO2) and calcium oxide (lime) for purification of sugar juice. The lime is introduced into the sugar making process as milk of lime at the carbonation tanks. The CO2 is used for pH adjustment in the carbonation tanks. In order to have the appropriate amount of CO2 for the carbonation system, approximately 80% of the combustion gases from the lime kiln are directed to the carbonation tanks with approximately 20% directly discharged to the atmosphere. Each kiln is equipped with a booster fan on top. (PTI No. 807-88)

**Emission Units:** EULIMEKILN1, ELIMEKILN2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. PM | 0.20 pounds per 1,000 pounds exhaust gases, on a dry basis2 | HourlyA | FG2KILN | SC VI.1  | **R 336.1331(1)(a), Table 31E** |

A If a stack test is used to demonstrate compliance with this emission limit, the hourly emission rate during testing shall be determined by the average of the qualified test runs performed in accordance with the method requirements.

**II. MATERIAL LIMIT(S)**

| **Material** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Coke  | 0.8 percentsulfur by weight2 | NA | FG2KILNS | SC V.1 | **R 336.1205(3)** |
| 2. Anthracite Coal  | 0.8 percent sulfur by weight2 | NA | FG2KILNS | SC V.1 | **R 336.1205(3)** |
| 1. Coke and Anthracite Coal (total)
 | 5000 tons2 | 12 month rolling time period | FG2KILNS | SC VI.4 | **R 336.1205(3)** |

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Except during startup, shutdown, or malfunction; the permittee shall not operate the lime kilns unless the carbonation system is operating and receiving combustion gases from the lime kilns.2 **(R 336.1201(3))**

**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))**

1. For each delivery of coke or anthracite coal, the representative sulfur content analysis shall be either on file with the permittee or supplied by the vendor at the time of the delivery. At least once per sugar production campaign, the permittee shall verify the vendor supplied sulfur content data by conducting an independent analysis in accordance with the ROP Fuel Sampling Plan, as may be amended with approval of the District Supervisor.2
**(R 336.1205(3))**

**See Appendix 9**

**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 and record the results of a non-certified visible emissions check on FG2KILNS at least once per operating day when FG2KILNS is venting to the atmosphere. The visible emissions check shall verify the presence of any visible emissions and need not follow the procedures specified in USEPA Method 9; therefore, multiple stacks may be observed simultaneously.  The date, time, name of visible emissions observer, and whether any visible emissions were observed shall be recorded.  If any visible emissions are observed, the permittee shall immediately implement one of the following procedures: **(R 336.1213(3),
R 336.1301)**
	1. If any visible emissions have been observed during the non-certified visible emissions check, the permittee shall perform and record the results of a 6-minute USEPA Method 9 visible emissions observation. If the results of the Method 9 visible emissions observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions and document the corrective actions taken.
		1. The permittee shall immediately initiate corrective actions and document the corrective actions taken based upon the initial non-certified visible emissions check that indicated the presence of any visible emissions.
2. Records of the non-certified visible emissions checks, Method 9 observations, and corrective actions that were taken shall be kept on file. **(R 336.1213(3))**
3. The permittee shall record the date, time, and duration that FG2KILNS was vented to the atmosphere.
**(R 336.1213(3))**
4. The permittee shall keep monthly records of the amount of coke and anthracite coal used in the lime kilns.2 **(R 336.1205(3))**
5. The permittee shall monitor the sulfur content by weight of the coke and coal according to the ROP Fuel Sampling Plan.2 **(R 336.1205(3))**

**See Appendices 7 and 9**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to Special Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to Special Condition 23 of Part A. Each semiannual report of monitoring deviations shall include summary information on number, duration, and cause of excursions and/or exceedances, and the corrective actions taken. If there were no exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. Reports shall be postmarked or received by 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), 40 CFR Part 60.7(c) & (d))**
3. Annual certification of compliance pursuant to Special Conditions 19 and 20 of Part A. Reports shall be post marked or received by 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 Dimensions****(inches)** | **Minimum Height Above Ground****(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SVLIMEKILN | 102 | 742 | **R 336.1201(3)** |

**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).

## FG635DEXGAS1BOILER

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

The affected units are existing boilers and process heaters subject to 40 CFR Part 63, Subpart DDDDD. The emission units in this flexible group are considered “units designed to burn Gas 1” subcategory. The subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition. These units must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i). (PTI No. 44-14)

**Emission Units:** EUPACKAGEBOILER3, EUBOILER4

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall only combust natural gas, refinery gas, and/or other gas 1 fuels in the boiler or process heater, except for burning liquid fuel during periods of gas curtailment or gas supply interruptions of any duration, or for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year as allowed in the “Unit designed to burn gas 1 subcategory” definition in 40 CFR 63.7575. **(40 CFR 63.7499(l), 40 CFR 63.7575)**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee must meet the requirements in paragraphs 40 CFR 63.7500(a)(1) through (3), except as provided in paragraphs 40 CFR 63.7500(b) through (e), stated in SC III.4 and SC III.6. The permittee must meet these requirements at all times the affected unit is operating, except as provided in paragraph 40 CFR 63.7500(f), stated in SC III.5.2 **(40 CFR 63.7500(a))**

2. The permittee must meet the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each gas 1 boiler or process heater at the source.2 **(40 CFR 63.7500(a)(1))**

3. At all times, the permittee must operate and maintain any affected source as defined in 40 CFR 63.7490, stated in SC IX.5, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.2 **(40 CFR 63.7500(a)(3))**

4. As provided in 40 CFR 63.6(g), USEPA may approve use of an alternative to the work practice standards.2 **(40 CFR 63.7500(b))**

1. The permittee shall comply with the above standards at all times of operation, except during periods of start‑up and shutdown, during which the permittee must comply only with Table 3 of 40 CFR Part 63, Subpart DDDDD.2 **(40 CFR 63.7500(f), 40 CFR 63.7505(a))**
2. For startup and shutdown, the permittee must meet the work practice standards according to item 5 of Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7540(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))**

1. The permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC V.4, no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.2, except as specified in paragraph (j) of 40 CFR 63.7510. Where paragraph (j) states that for existing affected sources (as defined in 40 CFR 63.7490) that have not operated between the effective date of the rule and the compliance date that is specified in 40 CFR 63.7495, stated in SC IX.2, the permittee must complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) no later than 30 days after the re-start of the affected source.2 **(40 CFR 63.7510(e) & (j))**

2. The permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.2, except as specified in paragraph (j) of this section. Where paragraph (j) states that for existing affected sources (as defined in 40 CFR 63.7490) that have not operated between the effective date of the rule and the compliance date that is specified in 40 CFR 63.7495, stated in SC IX.2, the permittee must complete the one-time energy assessment specified in Table 3 of 40 CFR Part 63, Subpart DDDDD no later than the compliance date specified in 40 CFR 63.7495, stated in SC IX.2.2 **(40 CFR 63.7510(e) & (j))**

3. The one-time energy assessment must be performed by a qualified energy assessor. The energy assessment must include the following with extent of the evaluation for items a through e below appropriate for the on-site technical hours listed in 40 CFR 63.7575, *Energy assessment* definition:2 **(Table 3 of 40 CFR Part 63, Subpart DDDDD)**

a. A visual inspection of the boiler or process heater system;

b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;

c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator;

d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;

e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified;

f. A list of cost-effective energy conservation measures that are within the facility's control;

g. A list of the energy savings potential of the energy conservation measures identified;

h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

4. The permittee must conduct a performance tune-up every 13 months unless the boiler is equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio. If the boiler is equipped with a continuous oxygen trim system, performance tune-ups must be conducted at least once every 5 years according to 40 CFR 63.7540(a)(10) and (12). Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up.

a. As applicable, inspect the burner and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, as described below). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject.

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

f. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs i through iii below:

i. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

ii. A description of any corrective actions taken as a part of the tune-up; and

iii. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

The permittee may delay the burner inspection specified in SC V.4a above until the next scheduled or unscheduled shutdown, but you must inspect each burner at least once every 72 months. **(40 CFR 63.7540(a)(10) and (12), 40 CFR 63.7515(d))**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee must keep records according to 40 CFR 63.7555(a)(1) and (2)2: **(40 CFR 63.7555(a)(1) & (2))**

a. A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under this part, other gas 1 fuel, or gaseous fuel subject to another subpart of this part or Part 60, 61, or 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.2 **(40 CFR 63.7555(h))**

3. The permittee must maintain records in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).2 **(40 CFR 63.7560(a))**

4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.2 **(40 CFR 63.7560(b))**

5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years.2 **(40 CFR 63.7560(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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545 and in 40 CFR Part 63, Subpart A.2 **(40 CFR 63.7495(d))**

5. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified.2 **(40 CFR 63.7545(a))**

6. The permittee must submit a notification of the actual date of start-up of a relocated boiler or process heater, delivered or postmarked within 15 calendar days after that date.2 **(40 CFR 63.9(b)(4)(v), 40 CFR 63.7545)**

7. If the permittee is required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530, the permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler and process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60th day following the completion of the initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status must only contain the information specified in paragraphs 40 CFR 63.7545(e)(1) and (8).2 **(40 CFR 63.7530(d) & (e), 40 CFR 63.7545(e)(1) & (8))**

a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the USEPA through a petition process to be a non-waste under 40 CFR 241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

b. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) “This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi).”

(ii) “This facility has had an energy assessment performed according to 40 CFR 63.7530(e).”

(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.”

8. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of Part 63, Part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section:2 **(40 CFR 63.7545(f))**

a. Company name and address;

b. Identification of the affected unit;

c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began;

d. Type of alternative fuel that the permittee intends to use;

e. Dates when the alternative fuel use is expected to begin and end.

9. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies.2 **(40 CFR 63.7550(a))**

10. Unless the USEPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to 40 CFR 7550(h), by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in 40 CFR 7550(b)(1) through (4). For units that are subject only to a requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12) and not subject to emission limits or operating limits, the permittee may submit only a 5-year compliance report as specified in 40 CFR 7550(b)(1) through (4), instead of a semi-annual compliance report.2 **(40 CFR 63.7550(b))**

a. The first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.2, and ending on July 31 or January 31, whichever date is the first date that occurs at least 5 years after the compliance date that is specified for the source in 40 CFR  63.7495, stated in SC IX.2. **(40 CFR 63.7550(b)(1))**

b. The first compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.2. The first 5-year compliance report must be postmarked or submitted no later than January 31. **(40 CFR 63.7550(b)(2))**

c. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**

d. Each subsequent compliance report must be postmarked or submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. The 5-year compliance reports must be postmarked or submitted no later than January 31. **(40 CFR 63.7550(b)(4))**

11. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule:2 **(40 CFR 63.7550(c)(1) & (5)(i) through (iv) & (5)(xiv))**

a. If the facility is subject to the requirements of a tune up, they must submit a compliance report with the information in i through v below:

i. Company and Facility name and address;

ii. Process unit information, emissions limitations, and operating parameter limitations;

iii. Date of report and beginning and ending dates of the reporting period;

iv. The total operating time during the reporting period;

v. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a 5-year tune-up according to 40 CFR 63.7540(a) (12). Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

12. The permittee must submit the reports according to the procedures specified in paragraphs h(1) through (3) of 40 CFR 63.7550, as listed below.2 **(40 CFR 63.7550(h))**

a. Within 60 days after the date of completing each performance test (defined in 40 CFR 63.2) as required by 40 CFR Part 63, Subpart DDDDD the permittee must submit the results of the performance tests, including any associated fuel analyses, required by 40 CFR Part 63, Subpart DDDDD and the compliance reports required in 40 CFR 63.7550(b), stated in SC VII.15, to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Road, Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the Administrator, the permittee must also submit these reports, including the confidential business information, to the Administrator in the format specified by the Administrator. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator. **(40 CFR 63.7550(h)(1))**

b. Within 60 days after the date of completing each CEMS performance evaluation test (defined in 40 CFR 63.2) the permittee must submit the relative accuracy test audit (RATA) data to the EPA's Central Data Exchange by using CEDRI as mentioned in paragraph (h)(1) of 40 CFR 63.7550. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator. **(40 CFR 63.7550(h)(2))**

c. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due the report the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator. **(40 CFR 63.7550(h)(3))**

13. The permittee’s applicable Reporting Requirements are in Table 9 of 40 CFR Part 63, Subpart DDDDD.2 **(40 CFR 63.7550)**

1. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.10. **(40 CFR 63.7540(b))**
2. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
	1. The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.5, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
	2. The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
	3. The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters by the compliance date, stated in SC IX.2.2 **(40 CFR Part 63, Subparts A and DDDDD)**

2. If the permittee has an existing boiler or process heater, the permittee must comply with this subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i).2 **(40 CFR 63.7495(b))**

3. The permittee must comply with the applicableGeneral Provisions in 40 CFR 63.1 through 63.15 that apply to this source per Table 10 of 40 CFR Part 63, Subpart DDDDD.2 **(40 CFR 63.7565)**

1. If the permittee decides to burn No. 6 fuel oil in EUPACKAGEBOILER3 other than times specified in SC II.1, the permittee must submit a permit modification request to incorporate the relevant components of Subpart DDDDD of 40 CFR Part 63 prior to burning No. 6 fuel oil. **(40 CFR Part 63, Subpart DDDDD)**
2. 40 CFR Part 63, Subpart DDDDD applies to existing affected sources as described in paragraph (a)(1) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
	1. The affected source of 40 CFR Part 63, Subpart DDDDD is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in 40 CFR 63.7575. **(40 CFR 63.7490(a)(1))**
3. A boiler or process heater is existing if it is not new or reconstructed, as defined below. **(40 CFR 63.7490(d))**
	1. A boiler or process heater is new if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
	2. A boiler or process heater is reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
4. The permittee must be in compliance with the emission limits, work practice standards, and operating limits of 40 CFR Part 63, Subpart DDDDD. These limits apply at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f), stated in SC III.5. **(40 CFR 63.7505(a))**
5. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.5) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC V.4, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC V.4, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**

**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) for EUBOILER4 only. This condition was not established pursuant to Rule 201(1)(a) for EUPACKAGEBOILER3.

# 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).

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| **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 | CO2e | 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 |
| HAP | Hazardous Air Pollutant |
| EGLE | Michigan Department of Environment, Great Lakes, and Energy | Hg | Mercury |
| hr | Hour |
| EU | Emission Unit | HP | Horsepower |
| FG | Flexible Group | H2S | Hydrogen Sulfide |
| GACS | Gallons of Applied Coating Solids | kW | Kilowatt |
| GC | General Condition | lb | Pound |
| GHGs | Greenhouse Gases | m | Meter |
| HVLP | High Volume Low Pressure\* | mg | Milligram |
| ID | Identification  | mm | Millimeter |
| IRSL | Initial Risk Screening Level | MM | Million |
| ITSL | Initial Threshold Screening Level | MW | Megawatts |
| LAER | Lowest Achievable Emission Rate | NMOC | Non-methane Organic Compounds |
| MACT | Maximum Achievable Control Technology | NOx | Oxides of Nitrogen |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MSDS | Material Safety Data Sheet | PM10 | Particulate Matter equal to or less than 10 microns in diameter |
| NA | Not Applicable |
| NAAQS | National Ambient Air Quality Standards | PM2.5 | Particulate Matter equal to or less than 2.5microns in diameter |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | pph | Pounds per hour |
| ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | % | Percent |
| PSD | Prevention of Significant Deterioration | psia | Pounds per square inch absolute |
| PTE | Permanent Total Enclosure | psig | Pounds per square inch gauge |
| PTI | Permit to Install | scf | Standard cubic feet |
| RACT | Reasonable Available Control Technology | sec | Seconds |
| ROP | Renewable Operating Permit | SO2 | Sulfur Dioxide |
| SC | Special Condition | TAC | Toxic Air Contaminant |
| SCR | Selective Catalytic Reduction | Temp | Temperature |
| SNCR | Selective Non-Catalytic Reduction | THC | Total Hydrocarbons |
| SRN | State Registration Number | tpy | Tons per year |
| TEQ | Toxicity Equivalence Quotient | µg | Microgram |
| USEPA/EPA | United States Environmental Protection Agency | µm | Micrometer or Micron |
| VOC | Volatile Organic Compounds |
| VE | Visible Emissions | 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 EUBOILER4:

**NOx Monitoring**

**Continuous Emission Monitoring System (CEMS) Requirements**

1. 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 to 40 CFR Part 60.

2. 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).

3. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emissions 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 which 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 EUBOILER4 during the reporting period;

d. A report of any periods that the CEMS exceeds the instrument range;

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

The permittee shall keep all monitoring data on file for a period of at least five years and make them 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

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. 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-B2875-2013. 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-B2875-2013a is being reissued as Source-Wide PTI No. MI-PTI-B2875-2019a.

|  |  |  |  |
| --- | --- | --- | --- |
| **Permit to Install Number** | **ROP Revision****Application Number** | **Description of Equipment or Change** | **Corresponding Emission Unit(s) or****Flexible Group(s)** |
| 44-14 | 201400163 | EUBOILER4 replaced EUWICKESBOILERWE and EUWICKESBOILEREA to bring the facility into compliance with 40 CFR Part 63, Subpart DDDDD. | EUBOILER4 |

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-B2875-2019.

| **Permit to Install Number** | **ROP Revision Application Number -** **Issuance Date** | **Description of Equipment or Change** | **Corresponding Emission Unit(s) or Flexible Group(s)** |
| --- | --- | --- | --- |
| 56-22 | 202200187 / December 13, 2022 | To incorporate PTI No. 56-22 into the ROP, which was to increase the PM emission limit and hours restriction for EUPULPDRYER. Additionally, the PTI removed the use of No. 6 fuel oil and the associated SO2 limit with burning the No. 6 fuel oil.  | EUPULPDRYER |

## Appendix 7. Emission Calculations

**EUPACKAGEBOILER3, EUPULPDRYER**

The permittee shall use the following calculations in conjunction with monitoring, testing, or recordkeeping data to determine compliance with the applicable requirements referenced in EUPACKAGEBOILER3 and EUPULPDRYER.

Compliant fuel oil has a sulfur content of 1.5% at an equivalent heat content of 18,000 BTU/pound. If the heat value of the fuel oil is other than 18,000 BTU/pound, the maximum allowed sulfur content shall be determined by the following equation:

Maximum allowed Sulfur content in percent by weight =

1.67 lbs SO2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO2 = wt.% sulfur

**FG2KILNS - Determining Compliant Coke**

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in (FG2KILNS).

Compliant coal/coke has a sulfur content of 0.8% at an equivalent heat content of 9,400 BTU/pound. The maximum allowed sulfur content shall be determined by the following equation:

Maximum allowed Sulfur content in percent by weight =

1.7 lbs SO2/1,000,000 BTU X (actual heat value in BTU per pound) X 100% X 1 lbs S/2 lbs SO2 = wt.% sulfur

## Appendix 8. Reporting

**A. Annual, Semiannual, and Deviation Certification Reporting**

The permittee shall use the 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. Fuel Sampling Plan

**Lime Kiln Coke or Anthracite Coal Sampling Plan/Options**

**Michigan Sugar Company - Caro Factory**

**Caro, Michigan**

The Michigan Department of Environment, Great Lakes, and Energy has asked for a coke and/or anthracite coal sampling protocol that can be used whenever it desires a coke and/or anthracite coal sampling at the Caro factory or requests that the company conduct the coke and/or anthracite coal sampling. In the following the term coke will be meant to include or in place of anthracite coal as appropriate.

Two options are being described; a single composite sampling and a five-day composite sampling. Each is designed to provide representative results for short term sampling. In the event the single composite sampling results in a preliminary indication that the sulfur content of the coke exceeds permitted limits, then the Company may conduct the more rigorous five-day composite sampling protocol, the results of which will be used for compliance purposes.

**Introduction:**

Coke is used as a fuel supply to the lime kiln at the Michigan Sugar Company, Caro Factory (Caro). These two options for a written coke sampling plan are designed to meet various environmental regulatory requirements. The fuel vendor provides the company with analytical data for the material being sold to the company. This data should be reviewed by the company to determine compliance with the appropriate Special Conditions of this Renewable Operating Permit (ROP). In addition, Testing/Sampling Special Condition V.1. requires verification of the vendor supplied analytical data by the Michigan Sugar Company collecting their own samples and having independent laboratory analysis performed.

The procedures outlined in this plan are intended to provide consistency and uniformity for collecting samples of coke that may be subjected to chemical and/or physical analysis and characterization. The options were developed consistent with the site-specific consideration and equipment arrangements at the Caro Factory.

**Safety Considerations:**

Due to the configuration of the lime kilns it is not safe to do sampling from the coke conveyors. Attempts to do so may cause injury or death.

**Coke Handling System Description:**

Coke is shipped by the vendor to a central location by either ship or train, then transported by truck directly to the factory. It is unloaded and stored in a coke pile. During the course of the processing season (a.k.a. Campaign), the coke supply is replenished as needed.

**Common elements of the two options**

The purpose of the sampling is to determine the concentration of sulfur in the fuel in units of pounds per million BTU of each composite sample according to the following procedures:

1. Determine heat content of the fuel

2. Determine moisture contents of fuel

3. Measure sulfur concentration in fuel sample

4. Convert concentrations into units of pounds of sulfur per MMBTU of heat content

The sulfur concentration of the sample shall be the value used for determining results. In the event the fuel analysis differs when there are split samples, the sampling and analysis shall be repeated.

**OPTION A (Single Event Composite Coke Pile Sampling)**

**SAMPLING PLAN:**

Samples are to be taken from the coke pile at the factory. The following detailed sampling plan shall be used. Unless and until sampling is performed, vendor supplied analyses may be utilized to demonstrate permit compliance provided it is representative of the coke being delivered to Michigan Sugar Company.

1. For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile.

2. At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

3. Combine the collected grab samples and prepare for transport to the analytical laboratory as described below.

a. Collect bulk grab samples from each of the five selected sampling locations.

1. Place the collected bulk grab samples into the same Ziploc bag and seal the bag after removing excess air. This bag should be placed into a second bag which should also be sealed after removing excess air. Clearly label the bag with the date and sample location description.
2. Complete the laboratory request form and a sample manifest per any laboratory instructions. Request that the laboratory create a composite of the collected bulk grab samples and split the composite sample so there is a duplicate available.

4. Determining sulfur concentration:

a. Determine heat content of the fuel; use ASTM D5865-04 or equivalent.

b. Determine moisture contents of fuel; use ASTM D3173-03 or ASTM E871-82 (1998) or equivalent.

c. Measure sulfur concentration in fuel sample; use ASTM D2492-90(1998) or ASTM D3177-89(2002) or equivalent.

d. Convert concentrations into units of pounds of sulfur per MMBTU of heat content.

**OPTION B (Five-Day Composite Coke Pile Sampling)**

This option allows for representative samples to be collected using the method described in OPTION A, for a period of five days. The bulk grab sample collected each day will be sent to a laboratory for analysis. The analytical data from the five-day testing will be considered when determining compliance.

**Compliance Determination**

The results of the sampling procedures set forth in Options A and B below may be used by EGLE for compliance purposes if the Company does not request additional sampling as set forth below.

If the single event composite sampling (OPTION A) protocols and analysis suggests non-compliance the Company may elect to conduct the five-day composite sampling (OPTION B). The results from the five-day composite sampling shall be used to determine compliance.

The Department may request the split samples (duplicates) created during the five-day composite sampling.

**Fuel Oil Sampling Plan/Options**

**Michigan Sugar Company - Caro Factory**

**Caro, Michigan**

The individual emission units can operate (fire) either fuel oil or natural gas, but not both at the same time. The fuel oil sampling plan will apply when firing fuel oil for all or part of a campaign. The Michigan Department of Environment, Great Lakes, and Energy has asked for a fuel oil sampling protocol that can be used when a fuel sample is desired at the Caro factory or when EGLE requests that the company conduct fuel oil sampling.

The fuel oil sampling plan consists of collecting a bulk grab sample, as described below.

**Introduction:**

Fuel oil is used as an optional fuel for the CE Package Boiler and three pulp dryers at the Michigan Sugar Company, Caro Factory (Caro). The fuel oil sampling plan is designed to meet various environmental regulatory requirements. The fuel vendor provides the company with analytical data for the material being sold to the company. This data should be reviewed by the company to determine compliance with the appropriate Special Conditions of this Renewable Operating Permit (ROP). In addition, Testing/Sampling Special Condition V.1. requires verification of the vendor supplied analytical data by the Michigan Sugar Company collecting their own samples and having independent laboratory analysis performed.

The procedures outlined in this plan are intended to provide consistency and uniformity for collecting samples of fuel oil that may be subjected to chemical and/or physical analysis and characterization. The plan was developed consistent with the site-specific consideration and equipment arrangements at the Caro Factory.

**Oil Handling System Description:**

Fuel oil is shipped to the site by truck and stored in a 400,000 gallon above ground fuel storage tank. The fuel oil tank is filled on an as needed basis. When firing using fuel oil, the fuel oil in the storage tank is continually heated and mixed. The mixing is achieved by pumping more fuel oil to the points of use than is needed and returning the excess fuel oil to the tank.

**SAMPLING PLAN:**

Access to fuel may be gained from three different locations; in the fuel oil tank pump house (point of distribution), at the CE package boiler (point of use) and in the pulp drier area (point of use). Unless and until sampling is performed, vendor supplied analyses may be utilized to demonstrate permit compliance provided it represents the fuel oil being delivered to Michigan Sugar Company

1. Collect a bulk grab sample from the identified sampling locations above.
2. Clearly label the sample with the date and sample location description.
3. Complete the laboratory request form and a sample manifest per any laboratory instructions. Request that the laboratory create a split sample so there is a duplicate available.
4. Determining sulfur concentration:
	1. Acceptable ASTM methodology, or its equivalent, shall be used.

**Compliance Determination**

The goal of the sampling is to determine the concentration of sulfur in the fuel to be burned in units of pounds per million BTU (See Appendix 7.).

The Department may request the split samples (duplicates) created during the bulk grab sampling.