STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings against **MICHIGAN SUGAR COMPANY,** a corporation organized under the laws of the State of Michigan and doing business at 763 North Beck Street in the Village of Sebewaing, County of Huron, State of Michigan	AQD No. 16-2017 SRN: B2873

STIPULATION FOR ENTRY OF FINAL ORDER
BY CONSENT

This proceeding resulted from allegations by the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) against Michigan Sugar Company (Company), a Michigan corporation located at 763 North Beck Street, Village of Sebewaing, County of Huron, State of Michigan, with State Registration Number (SRN) B2873. The MDEQ alleges that the Company is in violation of Title V of the federal Clean Air Act Amendments, the Michigan Administrative Code (MAC), 2001 AACS, R 336.1210 (Rule 210). Specifically, the MDEQ alleges that the Company has failed to timely submit an administratively complete Renewable Operating Permit (ROP) application pursuant to Title V of the federal Clean Air Act, 42 USC 7661 *et seq.*, thereby losing its application shield, as cited herein and in a May 10, 2017, AQD Violation Notice. The administratively complete ROP renewal application was required to be submitted to the MDEQ, AQD, not more than eighteen (18) months, but not less than six (6) months, before the expiration of the prior renewable operating permit, as specified in Section 5506(5) of Part 55. Air Pollution Control, of the Natural Resources and Environmental Protection Act, MCL 324.5506(5), and Rule 210(7), Mich Admin Code, R 336.1210(7). This Consent Order is the legally enforceable resolution to allow for continued operation under the current ROP until issuance of a renewed ROP. The Company and MDEQ stipulate to the termination of this proceeding by entry of a Stipulation for Entry of a Final Order by Consent (Consent Order).

The Company and MDEQ stipulate as follows:

1. The Natural Resources and Environmental Protection Act, 1994 PA 451 (Act 451), MCL 324.101 *et seq.* is an act that controls pollution to protect the environment and natural resources in this State.

2. Article II, Pollution Control, Part 55 of Act 451 (Part 55), MCL 324.5501 *et seq.* provides for air pollution control regulations in this State.

3. The MDEQ was created as a principal department within the Executive Branch of the State of Michigan pursuant to Executive Order 2011-1 and has all statutory authority, powers, duties, functions and responsibilities to administer and enforce all provisions of Part 55.

4. The Director has delegated authority to the Director of the AQD (AQD Director) to enter into this Consent Order.

5. The termination of this matter by a Consent Order pursuant to Section 5528 of Part 55 is proper and acceptable.

6. The Company and the MDEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the Company that the law has been violated.

7. This Consent Order becomes effective on the date of execution (effective date of this Consent Order) by the AQD Director.

8. The Company shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in this Consent Order.

COMPLIANCE PROGRAM AND IMPLEMENTATION SCHEDULE

9.A. Permits

1. On and after the effective date of this Consent Order and continuing until a Renewable Operating Permit for the permit application received by the MDEQ on May 26, 2017 has been issued (hereinafter Renewal ROP2017) the Company shall remain subject to the terms and conditions of ROP No. MI-ROP-B2873-2012, which is attached as Exhibit A, incorporated by reference, and made an enforceable part of this Consent Order.

2. Following the May 7, 2017 ROP renewal application deadline, on May 26, 2017, the Company submitted to the AQD, pursuant to the administrative rules of Part 55, including Rule 210, an administratively complete application for a renewal or modification of ROP for the air use emission sources at the Company's Sebewaing facility, including those permitted under ROP No. MI-ROP-B2873-2012.

3. Applicable laws and regulations authorize the AQD to require additional information necessary to evaluate or take final action on the application for Renewal ROP2017, as provided in Rule 210(3). The Company shall submit to the AQD information requested as required and within thirty (30) days of any written request, pursuant to Rule 210(3).

4. Upon the issuance of Renewal ROP2017, it shall be attached to this Consent Order and shall replace ROP No. MI-ROP-B2873-2012 as Exhibit A. Renewal ROP2017 shall be incorporated by reference, and made an enforceable part of this Consent Order as Exhibit A.

9.B. Subsequent Renewal of ROP

The Company shall submit to the AQD an administratively complete application for renewal of the Renewal ROP2017, Exhibit A, not more than 18 months, but not less than 6 months, before the ROP expiration date, as specified in Section 324.5506(5) of Part 55 and Rule 210(7), provided that the Sebewaing facility is still in operation at that time and requires an ROP for such operations.

GENERAL PROVISIONS

10. This Consent Order in no way affects the Company's responsibility to comply with any other applicable state and federal, or local laws or regulations, including without limitation, any amendments to the federal Clean Air Act, 42 USC 7401 *et seq.*, Act 451, Part 55 or their rules and regulations, or to the State Implementation Plan.

11. This Consent Order constitutes a civil settlement and satisfaction as to the resolution of the requirements and violations specifically addressed herein; however, it does not resolve any criminal action that may result from these same violations.

12. Within thirty (30) days after the effective date of this Consent Order, the Company shall pay to the General Fund of the State of Michigan, in the form of a check made payable to the "State of Michigan" and delivered to the Michigan Department of Environmental Quality, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157, a settlement amount of $5,000.00, which includes AQD costs for investigation and enforcement. This total settlement amount shall be paid within thirty (30) days of the effective date of this Consent Order. To ensure proper credit, all payments made pursuant to this Consent Order shall include the "Agreement Identification No. AQD40175" on the face of the check. This settlement amount is in addition to any fees, taxes, or other fines that may be imposed on the Company by law.

13. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.B of this Consent Order, the Company is subject to a stipulated fine of up to $10,000.00 per violation. On and after the effective date of this Consent Order, if the Company fails to comply with paragraph 9.A.3 of this Consent Order, the Company is subject to stipulated fines of $2,000.00 per violation

per day. The amount of the stipulated fines imposed pursuant to this paragraph shall be within the discretion of the MDEQ. Stipulated fines submitted under this Consent Order shall be by check, payable to the State of Michigan within thirty (30) days of written demand and shall be delivered to the Michigan Department of Environmental Quality, Accounting Services Division, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments shall include the "Agreement Identification No. AQD40175-S" on the face of the check. Payment of stipulated fines shall not alter or modify in any way the Company's obligation to comply with the terms and conditions of this Consent Order.

14. The AQD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order which is also a violation of any provision of applicable federal and state law, rule, regulation, permit, or MDEQ administrative order. However, the AQD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

15. To ensure timely payment of the settlement amount assessed in paragraph 12 and any stipulated fines assessed pursuant to paragraph 13 of this Consent Order, the Company shall pay an interest penalty to the State of Michigan each time it fails to make a complete or timely payment under this Consent Order. The interest penalty shall be determined at a rate of twelve percent (12%) per year compounded annually, using the full increment of amount due as principal, calculated from the due date specified in this Consent Order until the date that delinquent payment is finally paid in full. Payment of an interest penalty by the Company shall be made to the "State of Michigan" in accordance with paragraph 13 of this Consent Order. Interest payments shall be applied first towards the most overdue amount or outstanding interest penalty owed by the Company before any remaining balance is applied to subsequent payment amount or interest penalty.

16. The Company agrees not to contest the legal basis for the settlement amount assessed pursuant to paragraph 12. The Company also agrees not to contest the legal basis for any stipulated fines assessed pursuant to paragraph 13 of this Consent Order, but reserves the right to dispute in a court of competent jurisdiction the factual basis upon which a demand by MDEQ of stipulated fines is made. In addition, the Company agrees that said fines have not been assessed by the MDEQ pursuant to Section 5529 of Part 55 and therefore are not reviewable under Section 5529 of Part 55.

17. This compliance program is not a variance subject to the 12-month limitation specified in Section 5538 of Part 55.

18. This Consent Order shall remain in full force and effect until (i) a timely and administratively complete subsequent renewal ROP application has been received pursuant to paragraph 9.B., Act 451 and Title V of the CAA; (ii) the Company ceases operations at the Sebewaing facility; or (iii) the Company has documented that an ROP is no longer required for operations at the Sebewaing facility pursuant to Part 55 or regulations promulgated pursuant to Part 55. The Consent Order shall terminate only upon written notice of termination issued by the AQD Director. Prior to issuance of a written notice of termination, the Company shall submit a request, to the AQD Director at the Michigan Department of Environmental Quality, Air Quality Division, P.O. Box 30260, Lansing, Michigan 48909-7760, consisting of a written certification that the Company has fully complied with all the requirements of this Consent Order and has made all payments including all stipulated fines required by this Consent Order. Specifically, this certification shall include: (i) the date of compliance with each provision of the compliance program and the date any payments or stipulated fines were paid; (ii) a statement that all required information has been reported to the AQD Saginaw Bay District Supervisor; (iii) confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the facility; and, (iv) such information as may be requested by the AQD Director.

19. In the event Michigan Sugar Company sells or transfers the facility, with SRN B2873, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the Company shall also notify the AQD Saginaw Bay District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. As a condition of the sale, the Michigan Sugar Company must obtain the consent of the purchaser and/or transferee, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the AQD Saginaw Bay District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.

20. Prior to the effective date of this Consent Order and pursuant to the requirements of Sections 5511 and 5528(3) of Part 55, the public was notified of a 30-day public comment period and was provided the opportunity for a public hearing.

21. Section 5530 of Part 55 may serve as a source of authority but not a limitation under which the Consent Order may be enforced. Further, Part 17 of Act 451 and all other applicable laws and any other legal basis or applicable statute may be used to enforce this Consent Order.

22. The Company hereby stipulates that entry of this Consent Order is a result of an action by MDEQ to resolve alleged violations of its facility located at 763 North Beck Street, in Sebewaing, Michigan. The Company further stipulates that it will take all lawful actions necessary to fully comply with this Consent Order, even if the Company files for bankruptcy in the future. The Company will not seek discharge of the settlement amount and any stipulated fines imposed hereunder in any future bankruptcy proceedings, and the Company will take necessary steps to ensure that the settlement amount and any future stipulated fines are not discharged. The Company, during and after any future bankruptcy proceedings, will ensure that the settlement amount and any future stipulated fines remain an obligation to be paid in full by the Company to the extent allowed by applicable bankruptcy law.

The undersigned certifies that he/she is fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

MICHIGAN SUGAR COMPANY

DAVID NOBLE VICE PRESIDENT OPERATIONS
Print Name and Title

David Noble Date: 10-19-17
Signature

The above signatory subscribed and sworn to before me this 19th day of October, 2017.

Kristi Kay Sauer
Notary Public Signature

KRISTI KAY SAUER
Notary Public - Michigan
Bay County
My Commission Expires May 27, 2019
Acting in the County of _____

Approved as to Content:

Lynn Fiedler
Lynn Fiedler, Division Director
AIR QUALITY DIVISION
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Dated: 11/2/17

Approved as to Form:

Neil Gordon, Section Head
ENVIRONMENTAL REGULATION SECTION
ENVIRONMENT, NATURAL RESOURCES,
AND AGRICULTURE DIVISION
DEPARTMENT OF ATTORNEY GENERAL

Dated: 10/27/2017

FINAL ORDER

The Director of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

HAS HEREBY ORDERED that the Consent Order is approved and shall be entered in the record of the MDEQ as a Final Order.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Lynn Fiedler, Division Director
Air Quality Division

Effective Date: 11/2/17

Michigan Department of Environmental Quality
Air Quality Division

EFFECTIVE DATE: November 7, 2012

ISSUED TO

Michigan Sugar Company
Sebewaing Factory

State Registration Number (SRN): B2873

LOCATED AT

763 North Beck Street, Sebewaing, Michigan 48759

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B2873-2012

Expiration Date: November 7, 2017

Administratively Complete ROP Renewal Application Due Between May 7, 2016, and May 7, 2017

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Michigan Air Pollution Control Rule 210(1), 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 PA 451 and the federal Clean Air Act.

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B2873-2012

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to PA 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

_____

Chris Hare, Saginaw Bay District Supervisor

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Expiration Date: November 7, 2017
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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 Environmental Quality (MDEQ) 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 will be identified for each ROP term or condition. All terms and conditions that are included in a Permit to Install (PTI), are streamlined or subsumed, or are state-only enforceable will be noted as such.

In accordance with Section 5507 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, 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.

ROP No. MI-ROP-B2873-2012
Expiration Date: November 7, 2017
PTI No.: MI-PTI-2873-2012

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 Permit to Install (PTI) pursuant to Rule 201(2)(d) are designated by Footnote 1. **(R 336.1213(5)(a), R336.1214a(5))**

- Those conditions that are hereby incorporated in federally enforceable Source-wide PTI No. MI-PTI-B2873-2012 pursuant to Rule 201(2)(c) are designated by Footnote 2. **(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 Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (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 (EPA) 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 EPA 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 Rules 215 and 216. **(R 336.1213(1)(c))**

4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities **(R 336.1213(1)(d))**:
   a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
   c. Inspect, at reasonable times, any of the following:
      i. Any stationary source.
      ii. Any emission unit.
      iii. Any equipment, including monitoring and air pollution control equipment.

iv. Any work practices or operations regulated or required under the ROP.

d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.

5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of 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 EPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the EPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**

7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**

8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**

10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

Emission Limits

11. Except as provided in Subrules 2, 3, and 4 of Rule 301, 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 Rule 301(1)(a) or (b) unless otherwise specified in this ROP. The grading of visible emissions shall be determined in accordance with Rule 303. **(R 336.1301(1) in pertinent part)**:
    a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
    b. A limit specified by an applicable federal new source performance standard.

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

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Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1). **(R 336.2001)**

14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**

15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(4))**

Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate **(R 336.1213(3)(b))**:
    a. The date, location, time, and method of sampling or measurements.
    b. The dates the analyses of the samples were performed.
    c. The company or entity that performed the analyses of the samples.
    d. The analytical techniques or methods used.
    e. The results of the analyses.
    f. The related process operating conditions or parameters that existed at the time of sampling or measurement.

17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a responsible official which 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))**

19. A responsible official shall certify to the appropriate District Office of the AQD and the EPA 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 District Office of the AQD 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 EPA address is: US EPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, IL, 60604. **(R 336.1213(4)(c))**

20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**

21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP **(R 336.1213(3)(c))**:
    a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
    b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
    c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following **(R 336.1213(3)(c))**:
    a. Submitting a certification by a responsible official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
    b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete. The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.

23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate District Office of the AQD. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**

24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**

25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate District Office of the AQD. 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 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. **(R 336.1912)**

Permit Shield

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

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

27. Nothing in this ROP shall alter or affect any of the following:
    a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the EPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
    b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
    c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
    d. The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**

28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
    a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
    b. Administrative amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
    c. Administrative amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
    d. Minor permit modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
    e. State-only modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**

29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**

31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**

32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(9))**

33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(3), R 336.1216(2)(d), R 336.1216(4)(d))**

Reopenings

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

Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(7))**

Stratospheric Ozone Protection

36. If the permittee is subject to 40 CFR Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.

37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the EPA 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 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under Part 68 do not limit in any way the general duty provisions under Section 112(r)(1).

39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of Part 68 no later than the latest of the following dates as provided in 68.10(a):
    a. June 21, 1999,
    b. Three years after the date on which a regulated substance is first listed under 68.130, or
    c. The date on which a regulated substance is first present above a threshold quantity in a process.

40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.

41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

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

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.[2] **(R 336.1201(1))**

44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.[2] **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ.[2] **(R 336.1219)**

46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months, or has been interrupted for 18 months, the applicable terms and conditions from that PTI 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, MDEQ, AQD, P.O. Box 30260, Lansing, MI 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))**

Consent Orders

47. The conditions contained in this ROP for which a Consent Order is the only identified underlying applicable requirement shall be considered null and void upon the effective date of termination of the Consent Order. The effective date of termination is defined for the purposes of this condition as the date upon which the Termination Order is signed by the Chief of the AQD.

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).

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Expiration Date: November 7, 2017
PTI No.: MI-PTI-2873-2012

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.

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C. EMISSION UNIT 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
EUCEPACKAGEBOIL	CE Package boiler is a natural gas or fuel oil boiler, with an economizer.	5/4/1968	NA
EUDRYER#3	Dryer #3 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation.	9/1/1980, 3/1/1990, 3/12/1997	NA
EUDRYER#1	Dryer #1 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation.	5/1/1960, 3/1/1990	FG-PULPDRYERS
EUDRYER#2	Dryer #2 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation.	5/1/1960, 3/1/1990	FG-PULPDRYERS
EULIMEKILN	Vertical kiln (8000 ft^3) fired with Coke or Anthracite Coal for production of CO_2 and lime (CaO) for purification of sugar juice. The lime is introduced into the sugar making process as milk of lime at the carbonation tanks. The CO_2 is used for pH adjustment in the carbonation tank. In order to have the appropriate amount of CO_2 for the carbonation system, approximately 80% of the combustion gasses from the Lime Kiln are directed to the carbonation tanks with approximately 20% directly discharged to the atmosphere.	7/20/1983	NA
EUPELLETCOOLER	Cools beet pulp pellets coming off pellet mills before they are stored in bins, controlled with fabric filter.	3/15/1993	FGRULE290
EUPULPDUSTCOLL	Pulp pellets handling system is controlled by with a dust collector.	3/15/1993	FGRULE290

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUWICKESEASTBOILER	Coal fired boiler used to produce steam for processing sugar and for generating electricity. Boiler is controlled with a Multiclone and high efficiency venturi scrubber installed in the summer of 2006.	1/1/1940, 6/1/1985	FG-BOILERS
EUWICKESWESTBOILER	Coal fired boiler used to produce steam for processing sugar and for generating electricity. Boiler is controlled with a Multiclone and high efficiency venturi scrubber installed in the summer of 2006.	1/1/1940, 6/1/1985	FG-BOILERS

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EU- CEPACKAGEBOIL
EMISSION UNIT CONDITIONS

DESCRIPTION

CE Package boiler is a natural gas or fuel oil boiler, with an economizer.

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 pound per million BTUs of heat input.	24-hour period	EU-CEPACKAGEBOIL	V.1.	**(R336.1401(1)), Table 42**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

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PTI No.: MI-PTI-2873-2012

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 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 permittee or supplied by the vendor at time of delivery. At least once per campaign the permittee shall verify the vendor supplied sulfur content data 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. **(R336.1213(3)**

See Appendix 9 for fuel sampling plan

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct daily visible emissions surveys during daylight hours, for opacity from the stack (SVCEBOILERSTACK). The date and time of the visible emissions survey, together with the initials of the person performing the survey, shall be recorded on a log. If visible emissions in excess of approximately 15% opacity are observed for six minutes, the permittee shall perform and record at least one 15 minute visible emissions reading in accordance with Federal Reference Test Method 9, by a certified reader. When possible, readings shall be made during scheduled soot blowing, or startup and shutdown. The date, time, and Method 9 reader's initials shall be recorded on the visible emissions observation form. **(R 336.1213(3)) R336.1301)**

2. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon: **(R336.1213(3))**
   a) The applicable % sulfur by weight
   b) BTU's/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. Report 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))**

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

See Appendix 8

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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
SVCEBOILERSTACK	NA	NA	**NA**

IX. OTHER REQUIREMENT(S)

NA

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

ROP No. MI-ROP-B2873-2012
Expiration Date: November 7, 2017
PTI No.: MI-PTI-2873-2012

EU- DRYER#3
EMISSION UNIT CONDITIONS

DESCRIPTION

Dryer #3 is a natural gas or fuel oil fired, rotary kiln, pulp dryer controlled with a Multicyclone with Flue Gas Recirculation.

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	0.10 pound per 1,000 pounds of exhaust gases.[2]	Testing Protocol	EU-DRYER#3	V. 2. VI. 1., 2., & 3.	**(R336.1201(3), R336.331(c))**
2. SO2	1.67 pound per million BTUs heat input.[2]	Based upon a 24-hour period.	EU-DRYER#3	V. 1. & VI. 6.	**(R336.1201(3), R336.1205, R336.1402)**
3. VOC	78.5 lb/hr.[2]	Testing Protocol	EU-DRYER#3	GC.13	**(R336.1205, R336.1702, R336.2810, 40 CFR 52.21(j))**
4. VOC	245 tpy.[2]	12-month rolling time period	EU-DRYER#3	VI. 4 & 7.	**(R336.1205, R336.1702, R336.2810, 40 CFR 52.21(j))**
5. CO	160 lb/hr.[2]	Testing Protocol	EU-DRYER#3	GC.13.	**(R336.1205, R336.2810, 40 CFR 52.21(j))**
6. CO	442 tpy.[2]	12-month rolling time period	EU-DRYER#3	VI. 4 & 7.	**(R336.1205, R336.2810, 40 CFR 52.21(j))**

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II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel oil	2.12 million gallons per campaign year burned in the furnace.[2]	Per Campaign Year*	EU-DRYER#3	VI. 4.	**(R336.1201(3), R336.1205)**

*Campaign year is defined as beginning August 1 and ending July 31.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Any additional firing of EU-DRYER#3 after use of the allowed 2.12 million gallons of fuel oil per year will be done with natural gas.[2] **(R336.1205)**

2. Permittee shall not operate EU-DRYER#3 unless the multiple cyclone collector and flue gas recirculation system are installed, maintained, and operated in a satisfactory manner.[2] **(R336.1910)**

3. Permittee shall not operate EU-DRYER#3 for more than 6,240 hours per campaign year.[2] **(R336.1205, R336.2802, 40 CFR 52.21)**

4. Permittee shall not operate EU-DRYER#3 for more than 1032 hours each in the ozone control period, defined as May 1 through September 30 of each year. **(R336.1205, R336.1702, R336.1801(1)(f))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 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 permittee or supplied by the vendor at time of delivery. At least once per campaign the permittee shall verify the vendor supplied sulfur content data 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. **(R336.1205, R336.1402)**

2. Verification of particulate emission rates from the process by testing at owner's expense, in accordance with Department requirements, on or before six months of the ROP expiration date. Verification of emission rates includes the submittal of complete report of the test results. **(R336.1213(3), R336.2001(a)(e))**

    a. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R336.1213(3))**

b. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. **(R336.2001(3))**
c. The permittee shall submit a complete test report of the test results to the District Supervisor or the Technical Programs Unit within 60 days following the last date of the test. **(R336.2001(4))**

See Appendices 5 and 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct daily visible emissions surveys during daylight hours, for opacity from the stack (SVDRYER3STACK). The date and time of the visible emissions survey, together with the initials of the person performing the survey, shall be recorded on a log. If visible emissions in excess of approximately 15% opacity are observed for six minutes, the permittee shall perform and record at least one 15 minute visible emissions reading in accordance with Federal Reference Test Method 9, by a certified reader. When possible, readings shall be made during startup and shutdown. The date, time, and Method 9 reader's initials shall be recorded on the visible emissions observation form. **(40CFR64.6(c)(1), R336.1301)**

2. When operating, permittee shall continuously monitor the air flow through the flue gas recirculation system with a differential pressure cell or pitot tube or similar device. Results of the monitoring shall be recorded every hour on a chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. The backup indicator shall be the pressure change in the flue gas recirculation fan. Repairs shall be made to the flue gas recirculation system as soon as is reasonable after detection of a malfunction and a record of the malfunction and repairs taken to maintain compliance with the requirements of the RO Permit shall be recorded and kept on file. **(40CFR64.6(c)(1), R336.1205)**

3. When operating, permittee shall continuously monitor the pressure drop across the multiclone with differential pressure instrumentation. Results of the monitoring shall be recorded every hour on a chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. Repairs shall be made to the multiclones as soon as is reasonable after detection of a malfunction that interferes with satisfactory operations and a record of the malfunction and repairs taken to maintain compliance with the requirements of this RO Permit shall be recorded and kept on file. **(40CFR64.6(c)(1), R336.1205)**

4. Permittee shall keep a written log of hours of operation of EU-DRYER#3. **(R336.1205)**

5. Permittee shall monitor and record the gallons of fuel oil burned in EU-DRYER#3 on a monthly basis, using a method or instrumentation acceptable to the District Supervisor of the Air Quality Division for annual emission reporting purposes and to demonstrate compliance with the annual fuel usage limit. **(R336.1205)**

6. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon
   a. The applicable % sulfur by weight
   b. BTU's/lb or BTU/gallon
   c. The calculated pound per MMBTU sulfur adjusted to 18,000 Btu (Appendix 7 of the ROP) **(R336.1205, R336.1402)**

7. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month rolling time period records of VOC and CO emissions from EU-DRYER#3, as required by SC I.4 and I.6, using emission factors developed during the most recent emission testing. The permittee shall keep all records on file at the facility for a period of at least 5 years and make them available to the Department upon request. **(R336.1205, R336.1702, R336.2810, 40 CFR 52.21(j))**

8. The permittee shall initiate the Malfunction Abatement Plan in Appendix 10 if the monitored pressure drop across the multiclones less than 3.0 or greater than 12.0 inches of water or the air flow through the flue gas recirculation system is less than the 5,000 SCFM or greater than 19,000 SCFM established in the Malfunction Abatement Plan or when abnormal visible emissions are observed. **(40CFR64.7(d), R336.1213(3), R336.1911, R336.1912)**

See Appendices 7 and 10

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. Report 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))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be postmarked or received by 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

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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. SVDRYER3STACK	96[2]	100[2]	**(R336.2804, 40 CFR 52.21(d)**

IX. OTHER REQUIREMENT(S)

1. If the Malfunction Abatement Plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the Malfunction Abatement Plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. **(R336.1911, R336.1912)**

2. The permittee shall notify the District Office of the AQD for the need to modify the CAM monitoring plan if the approved monitoring plan is found to be inadequate and shall submit a proposed modification to the plan if appropriate. **(40 CFR 64.7)[2]**

3. The permittee shall comply with all requirements of 40 CFR Part 64. **(40 CFR Part 64)[2]**

See Appendices 3 and 10

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).

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EU-LIMEKILN
EMISSION UNIT CONDITIONS

DESCRIPTION

Vertical kiln (8000 ft^3) fired with Coke or Anthracite Coal for production of CO_2 and lime (CaO) for purification of sugar juice. The lime is introduced into the sugar making process as milk of lime at the carbonation tanks. The CO_2 is used for pH adjustment in the carbonation tank.

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 basis [2]	test method	EULIMEKILN (booster fans on top of kiln)	SC VI 1 & 2	(R 336.1331(1)(a), Table 31E)

II. MATERIAL LIMIT(S)

	Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Coke	0.7 percent sulfur by weight	NA	EULIMEKILN	Samples of coke shall be collected and analyzed under the ROP fuel sampling plan	R 336.1205(3)
2.	Anthracite Coal	0.7 percent sulfur by weight	NA	EULIMEKILN	Samples of coal shall be collected and analyzed under the ROP fuel sampling plan	R 336.1205(3)
3.	Coke and Anthracite Coal (total)	5000 tons	12 month rolling time period	EULIMEKILN	Special Condition VI.2	R 336.1205(3)

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III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Except during process startup, shutdown, or malfunction, permittee shall not operate the lime kiln unless the carbonation system is operating and receiving combustion gases from the lime kiln. **(R336.1201(3))** [2]

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. NA

V. TESTING/SAMPLING

Records shall be kept on file for a period of 5 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. **(R 336.1205(3), R 336.1213(3))**

See Appendices 5 and 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct daily visible emission surveys during daylight hours for opacity from the lime kiln stacks. The data and time of the survey, together with the initials of the person performing the survey, shall be recorded on a log. If visible emissions in excess of 15 percent opacity are observed for six minutes, the permittee shall perform and record at least one 15-minute visible emission reading in accordance with Federal Test Method 9, by a certified reader. When possible, readings shall be performed during scheduled ash pulling, startup, or shutdown. The date, time, and Method 9 reader's initials shall be recorded on the visible emission observation form. **(R 336.1213(3), R 336.1301)**

2. Permittee shall keep daily records of the approximate amount of coke and anthracite coal used in the lime kiln. Such daily records shall be trued up periodically, with a final accounting to be made at the end of the sugar production campaign. **(R 336.1205(3), R 336.1213(3))**

3. 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 Appendix 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. Report 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))**

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

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.	SVLIMEKILN1 w/gravity damper	15 by 13 [2]	90 [2]	**(R 336.1201(3))**
2.	SVLIMEKILN2 w/gravity damper	14 by 14 [2]	90 [2]	**(R 336.1201(3))**
3.	SVPRECARB @ 60º angle	NA	NA	**(R 336.1201(3))**
4.	SVCARBONATION1	NA	NA	**(R 336.1201(3))**
5.	SVCARBONATION2	NA	NA	**(R 336.1201(3))**

IX. OTHER REQUIREMENT(S)

1. NA

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

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D. FLEXIBLE GROUP CONDITIONS

Part D outlines 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
FG-BOILERS	Coal fired spreader stoker boilers.	EUWICKESEASTBOILER, EUWICKESWESTBOILER
FG-PULPDRYERS	Fuel oil fired rotary kiln pulp dryers.	EUDRYER#1, EUDRYER#2
FGRULE290	Pulp handling equipment.	EUPULPWETSCRUB, EUPELLETCOOLER, EUPULPDUSTCOLL

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FG-BOILERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emission Units: EUWICKESWESTBOIL, EUWICKESEASTBOIL fired on coal

POLLUTION CONTROL EQUIPMENT

Multiclone and high efficiency venturi scrubber.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.45 pound per 1,000 pounds of exhaust gases, corrected to 50% excess air.[2*]	Testing Protocol	FG-BOILERS	V. 2. VI.1, 2, 3	**(R336.1331(a)) Table 31.A.3**
2. SO2	2.50 pounds per million BTUs heat input.[2]	Based upon a 24-hour period.	FG-BOILERS	V. 1 VI. 4.	**(R336.1201(3); R336.1401))**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the FG-BOILERS unless the multiclone collectors are installed, maintained, and operated in a satisfactory manner.[2] **(R336.1910)**

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IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. For each delivery of coal the representative sulfur content analysis shall be either on file with permittee or supplied by the vendor at time of delivery. At least once per campaign the permittee shall verify the vendor supplied sulfur content data 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. **(R336.1213(3)**

2. Verification of particulate emission rates from the process by testing at owner's expense, in accordance with Department requirements, no later than 6 months prior to expiration of this ROP's expiration. Verification of emission rates includes the submittal of complete report of the test results. Stack testing should be conducted using method 5B or 5C, or an alternative method approved in writing by the AQD. **(R336.1331(2), R336.1213(3) R336.2001(a)(e))**

   a. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R336.1213(3))**

   b. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. **(R336.2001(3))**

   c. The permittee shall submit a complete test report of the test results to the District Supervisor or the Technical Programs Unit within 60 days following the last date of the test. **(R336.2001(4))**

See Appendices 5 and 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct daily visible emissions surveys during daylight hours, for opacity from the stacks. The date and time of the visible emissions survey, together with the initials of the person performing the survey, shall be recorded on a log. If visible emissions in excess of approximately 15% opacity are observed for six minutes, the permittee shall perform and record at least one 15-minute visible emissions reading in accordance with Federal Reference Test Method 9, by a certified reader. When possible, readings shall be made during scheduled ash pulling, soot blowing, or startup and shutdown. The date, time, and Method 9 reader's initials shall be recorded on the visible emissions observation form. **(40CFR64.6(c)(1), R 336.1213(3)) R336.1301)**

2. Permittee shall continuously monitor the pressure drop across the multiclone with differential pressure instrumentation. Results of the monitoring shall be recorded once per shift every day on a chart recorder or log and shall be kept on file. Any repairs required to maintain the pressure drop at reasonable operating levels shall be recorded and kept on file. **(R336.1201(3), 40CFR64.6(c)(1), R336.1213(3))**

3. Permittee shall continuously monitor the pressure drop and liquid flow across the wet scrubber. Results of the monitoring shall be recorded every hour on a chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. Any repairs required to maintain the pressure drop or liquid flow at reasonable operating levels shall be recorded and kept on file. **(40CFR64.6(c)(1), R336.1213(3))**

4. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the coal based upon **(R336.1213(3))**
   a. The applicable % sulfur by weight
   b. BTU's/lb or BTU/gallon
   c. The calculated pound per MMBTU sulfur adjusted to 12,000 Btu (Appendix 7)

5. The permittee shall initiate the malfunction abatement plan in Appendix 10 if the monitored pressure drop across the multiclones exceeds the parameters established in the malfunction abatement plan. **(40CFR64.7(d), R336.1213(3))**

6. The permittee shall initiate the malfunction abatement plan in Appendix 10 if the monitored pressure drop or liquid flow across the wet scrubber are outside of the minimum parameter s established during the most recent performance test which demonstrates compliance with the applicable emission limits. **(40CFR64.7(d), R336.1213(3))**

See Appendices 3, 7 and 10

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. Report 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))**

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. Report shall be postmarked or received by 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

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VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stack 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. SVWICKESTACK	108[2]	178[2]	**(R336.1201(3))**

IX. OTHER REQUIREMENT(S)

1. If the Malfunction Abatement Plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the Malfunction Abatement Plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. **(R 336.1213(3))**

2. The permittee shall notify the District Office of the AQD for the need to modify the CAM monitoring plan if the approved monitoring plan is found to be inadequate and shall submit a proposed modification to the plan if appropriate. **(40 CFR 64.7)[2]**

3. The permittee shall comply with all requirements of 40 CFR Part 64. **(40 CFR Part 64)** [2]

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).

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FG-PULPDRYERS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emission Units: EUDRYER#1 and EUDRYER#2 are natural gas or fuel oil fired rotary kiln pulp dryers both are controlled with Multiclones and Flue Gas Recirculation.

POLLUTION CONTROL EQUIPMENT

Multiclone collector and flue gas recirculation system.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.10 pound per 1,000 pounds of exhaust gases, for each of the two dryers.[2]	Testing Protocol	EUPDRYER#1 and EUDRYER#2	SC V. 2. VI. 1, 2 and 3.	**(R336.1331(a))**
2. SO2	1.7 pounds per million BTUs heat input.[2]	Based upon a 24-hour period.	EUDRYER#1 and EUDRYER#2	SC V. 1, VI. 4.	**(R336.1402)**

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate the pulp dryers unless the multiclone collector and flue gas recirculation system are installed, maintained, and operated in a satisfactory manner.[2] **(R336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip and maintain the multiclone with instrumentation to continuously monitor the pressure drop across the multiclone.[2] **(R336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 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 permittee or supplied by the vendor at time of delivery. At least once per campaign the permittee shall verify the vendor supplied sulfur content data 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. **(R336.1213(3)**

2. Verification of particulate emission rates from the process by testing at owner's expense, in accordance with Department requirements, on or before six months of this ROP's expiration date. Verification of emission rates includes the submittal of complete report of the test results. Stack testing should be conducted using method 5B or 5C, or an alternative method approved in writing by the AQD. **(R336.1331(2), R336.1213(3) R336.2001(a)(e))**

   a. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. **(R336.1213(3))**

   b. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. **(R336.2001(3))**

   c. The permittee shall submit a complete test report of the test results to the District Supervisor or the Technical Programs Unit within 60 days following the last date of the test. **(R336.2001(4))**

See Appendices 5 and 9

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. Permittee shall conduct daily visible emissions surveys during daylight hours, for opacity from the stack (SVDRYER1&2STACK). The date and time of the visible emissions survey, together with the initials of the person performing the survey, shall be recorded on a log. If visible emissions in excess of approximately 15% opacity are observed for six minutes, the permittee shall perform and record at least one 15-minute visible emissions reading in accordance with Federal Reference Test Method 9, by a certified reader. When possible, readings shall be made during scheduled startup and shutdown. The date, time, and Method 9 reader's initials shall be recorded on the visible emissions observation form. **(40CFR64.6(c)(1), R 336.1213(3)) R336.1301)**

2. When operating, permittee shall continuously monitor the air flow through the flue gas recirculation system with a differential pressure cell or pitot tube or similar device. Results of the monitoring shall be recorded every hour on a chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. The backup indicator shall be the pressure change in the flue gas recirculation fan. Repairs shall be made to the flue gas recirculation system as soon as is reasonable after detection of a malfunction and a record of the malfunction and repairs taken to maintain compliance with the requirements of the RO Permit shall be recorded and kept on file. **(R336.1205) (40CFR64.6(c)(1), R336.1213(3))**

3. When operating, permittee shall continuously monitor the pressure drop across the multiclone with differential pressure instrumentation. Results of the monitoring shall be recorded every hour on a

chart recorder or log and shall be kept on file. If a log is the recording method used, and best efforts are employed to keep hourly records, it shall not be a deviation if at least three data points per shift are recorded. Repairs shall be made to the multiclones as soon as is reasonable after detection of a malfunction that interferes with satisfactory operations and a record of the malfunction and repairs taken to maintain compliance with the requirements of this RO Permit shall be recorded and kept on file. **(40CFR64.6(c)(1), R336.1213(3))**

4. For each new sulfur content analysis, the permittee shall calculate the sulfur content of the fuel oil based upon **(R336.1213(3))**
   a. The applicable % sulfur by weight
   b. BTU's/lb or BTU/gallon
   c. The calculated pound per MMBTU sulfur adjusted to 18,000 Btu (Appendix 7)

5. The permittee shall initiate the malfunction abatement plan in Appendix 10 if the monitored pressure drop across the multiclones or the air flow through the flue gas recirculation system exceeds the parameters established in the malfunction abatement plan. **(40CFR64.7(d), R336.1213(3))**

See Appendices 7 and 10

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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's 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's 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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDRYER1&2STACK	96[2]	100[2]	**(R336.1201(3))**

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IX. OTHER REQUIREMENT(S)

1. If the Malfunction Abatement Plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the Malfunction Abatement Plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-on air pollution control device, or monitoring equipment during similar malfunction events, and a program for corrective action for such events. **(R 336.1213(3))**

2. The permittee shall notify the District Office of the AQD for the need to modify the CAM monitoring plan if the approved monitoring plan is found to be inadequate and shall submit a proposed modification to the plan if appropriate. **(40 CFR 64.7)**[2]

3. The permittee shall comply with all requirements of 40 CFR Part 64. **(40 CFR Part 64)** [2]

See Appendix 10

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).

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FGRULE290
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

Emission Units: EUPELLETCOOLER, EUPULPDUSTCOLL

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**

2. Each emission unit that the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(a)(ii))**

   a. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
   b. For noncarcinogenic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 microgram per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(B))**
   c. For carcinogenic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(a)(ii)(C))**
   d. The emission unit shall not emit any air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(a)(ii)(D))**

3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(a)(iii))**

a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have an exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(a)(iii)(A))**
b. The visible emissions from the emission unit are not more than 5 percent opacity in accordance with the methods contained in Rule 303. **(R 336.1290(a)(iii)(B))**
c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(a)(iii)(C))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the DEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by the AQD District Supervisor. **(R 336.1213(3))**

    a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
    b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
    c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
    d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(a)(ii) and (iii). **(R 336.1213(3))**
    e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. **(R 336.1213(3), R 336.1290(c))**

2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**

   a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(b), R 336.1213(3))**
   b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate**. (R 336.1213(3))**

3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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E. NON-APPLICABLE REQUIREMENTS

At the time of 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: Abbreviations & Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H_2S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure *	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO_2	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	µg	Microgram
MDEQ	Michigan Department of Environmental Quality	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (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

Specific monitoring requirement procedures, methods or specifications 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 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

The specific testing requirement plans, procedures, methods, or specifications for the testing requirements identified and referenced in EUCEPACKAGEBOILER, EUDRYER#3, EULIMEKILN, FGBOILERS and FGPULPDRYERS are detailed in the AQD approved Fuel Sampling Plan attached at Appendix 9.

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-B2873-2008. 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-B2873-2008 is being reissued as Source-Wide PTI No. MI-PTI-B2873-2012.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
36-08 - voided	Temporary Boiler	Temporary boiler, permitted but never brought on site.	FG-Boilers

Appendix 7. Emission Calculations

FG-PULPDRYERS

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

Compliant fuel oil has a heat content of 18,274 BTU/pound at 1.5 wt. % sulfur content. If the heat value of the fuel oil is other than 18,274 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

EU-CEPACKAGEBOIL and EU-PULPDRYER#3

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in (EU-CEPACKAGEBOIL and EU-PULPDRYER#3).

Compliant fuel oil has a heat content of 18, 000 BTU/pound at 1.5 wt. % sulfur content. 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

FG-BOILERS

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

Compliant coal has a heat content of 12,000 BTU/pound at 1.5 wt. % sulfur content. If the heat value of the coal in the boilers is other than 12,000 BTU/pound, the maximum allowed sulfur content shall be determined by the following equation:

Maximum allowed Sulfur content in percent by weight =

2.40 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

EU-LIMEKILN - 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 (EU-LIMEKILN).

Compliant coal/coke has a heat content of 9,400 BTU/pound at 0.8 wt. % sulfur content. If the heat value of the coal/coke in the lime kiln is other than 13,200 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 MDEQ Report Certification form (EQP 5736) and MDEQ 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

FUEL SAMPLING PLAN

Coal Sampling Plan/Options
Michigan Sugar Company - Sebewaing Factory
Sebewaing, Michigan

The Michigan Department of Environmental Quality has asked for a coal sampling protocol that can be used whenever it desires a coal sampling at the Sebewaing factory or requests that the company conduct the coal sampling.

Three options are being approved. Each is designed to give initial results for short term sampling. In the event the short term coal sampling results in a preliminary indication that the sulfur content of the coal exceeds permitted limits, then the Company may conduct a more rigorous five day coal sampling protocol under either Option A, Option B, or Option C, the results of which will be used for compliance purposes.

Introduction:

Coal is used as a fuel supply to two stoker fired boilers systems at the Michigan Sugar Company, Sebewaing Factory (Sebewaing). These three options for a written coal sampling plan are designed to meet various environmental regulatory requirements.

The procedures outlined in this plan are intended to provide consistency and uniformity for collecting samples of coal 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 Sebewaing Factory.

Safety Considerations:

In addition to the Michigan Sugar Company safety policies and procedures, coal sampling activities require the sampling staff to collect samples in and around the boiler operations. Heavy equipment traffic, mechanical coal storage and moving equipment, confined spaces, combustion devices with ignition sources and hot surfaces are present. High ambient work temperatures are prevalent, elevated work platforms and confined spaces can pose additional safety hazards. Failure to follow safe access and work practices could cause injury or death.

Additionally, high noise levels in the boiler room require personal hearing protection which can reduce an individual's ability to hear verbal or other audio warnings. Special care and alertness are required to perform the coal sampling described in this procedure.

This plan does not address safety considerations nor special safety provisions that may be required to conduct sampling safely and in accordance with worker occupational safety and health regulations. Persons conducting the sampling described in this plan are directed to safety professions for consultation and direction for special safety considerations and safe procedures/access for collecting coal samples.

Coal Handling System Description:

Coal is shipped to one or two locations in the "thumb" region of Michigan on up to three barges per year. The barges are off-loaded into a pile at the docks. The coal is then shipped via trucks to the various Michigan Sugar factory locations. During the course of the processing season (a.k.a. Campaign), coal may also be redistributed among the various Michigan Sugar operations. The coal is dumped by the delivery truck and then piled (outdoors) using a rubber tired front end loader. The loader is also used to feed the coal conveyor which provides coal to the coal bunker. A schematic diagram showing the coal handling system is provided in Figure 1.

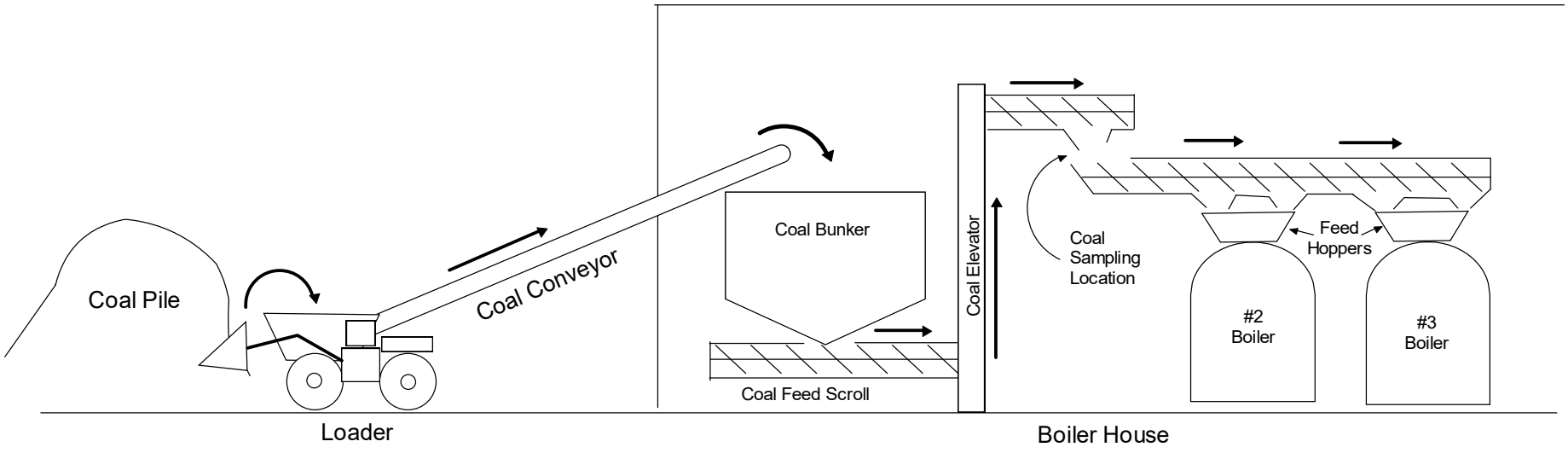
From the coal bunker, coal drops to the coal feed scroll which conveys the coal to the coal elevator. This bucket elevator drops the coal into the upper feed scroll. A drop point is located between the elevator scroll and the boiler feed hopper scroll. [This drop point has been selected for the coal sampling location if the conveyor sampling is selected.] During operation of the system, the elevator scroll drops coal into the feed hopper scroll. This drop provides a good representation of the coal type, size, and physical characteristics being fed to the stoker boilers.

Once the feed hoppers are filled, the elevator and feed scrolls are stopped and the boilers stoke the coal as supplied by the feed hoppers. When the coal in the feed hoppers is emptied, the system is started and the hoppers are refilled. The refilling typically takes from 5 minutes to 10 minutes to complete. The rate of coal usage from the feed hoppers is highly dependent on the rate of fuel feed to the boilers. The fuel feed rate is tied directly to the boiler steam demand.

ROP No. MI-ROP-B2873-2012
Expiration Date: November 7, 2017
PTI No.: MI-PTI-2873-2012

Figure 1

Boiler House Schematic Diagram
Michigan Sugar Company
Sebewaing, Michigan



Common elements of the three 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.

Compliance Determination

The results of the sampling procedures set forth in any one of the Options A-C below may be used by MDEQ for compliance purposes if the Company does not request additional sampling as set forth below.

If the option used suggests non compliance the Company may elect to conduct a five day fuel sampling utilizing the protocol described Option A or B, in which case the results from that five day fuel sampling are to be used to determine compliance. The sample collected each day will be used to create a composite sample (following the protocol) that will be tested.

The MDEQ may request split samples for the five day fuel sampling, as well as a split sample of the composite sample.

OPTION A (Conveyor Sampling)

Under the current operating procedures, the coal elevator and feed hopper scrolls operate for approximately 5 minutes and then are turned off (once the boiler feed hoppers are filled). The feed hoppers supply coal to the stoker. Observations made in late 2006 indicate that the feed hoppers require refilling at approximately 15 to 20 minute intervals.

Since the coal system operates several times in any given hour, a representative grab sample would consist of coal collected from each cycling of the coal elevator and hopper feed system. Since the system "cycles" several times over the course of an operating hour, it provides a suitable interval for collecting the total coal grab sample.

1. The representative grab sample is collected over the course of an hour by collecting coal from each hopper filling cycle. This is done by placing the collection device into the stream of the free falling coal as it leaves the elevator scroll and is dropped into the feed hopper scroll.

These samples can later be combined for the composite sample.

2. Transfer the contents of each device into a clean zipper closure style sampling bag. Seal and label the bag with the sampling time, date and sampling run or interval. When sealing the bag, push excess air out of the bag and be sure to seal in any moisture collected with the sample.

3. The collected grab samples are to be prepared for transport to the analytical laboratory as described below.

    a. Pour out each grab sample and thoroughly mix them all on a clean plastic sheet.
    b. Break sample pieces larger than 3 inches into smaller sizes.
    c. Make a pie shape with the entire composite sample and subdivide it into four equal parts.
    d. Separate one of the quarter samples as the first subset. Discard the other three quarters
    e. If this subset is too large for grinding, repeat the procedure in paragraphs (c) and (d) of this section with the quarter sample until a suitable sized subset is obtained.

f. If available, grind the sample in a mill.
g. Place the final sample into a new and clean zipper closure poly bag, again being careful to 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 and date the composite sample for transport to the laboratory. Complete the laboratory request form and a sample manifest per any laboratory instructions.

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 (Coal Pile Sampling)

SAMPLING PLAN:

A composite sample may be taken of the coal piles at the dock or at the factory. The following detailed sampling plan maybe used for either location. Unless and until sampling is performed, vendor supplied analyses may be utilized to demonstrate permit compliance provided it is representative of the loaded barges making the delivery 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. Follow paragraph #3 under Option A to composite the sample for analysis.
4. Follow paragraph #4 under Option A to determine sulfur content of sample.

OPTION C (Vendor Sampling)

The Company's coal vendor conducts sampling of the coal being supplied to the Company. The Company may use and rely upon such sampling as the indicator of the sulfur content of the coal being supplied to and fired by the Company if the procedure used for sampling is reasonably designed and implemented to give an accurate measure of the overall sulfur content of the coal. The Company will obtain from the vendor the process and procedure used in determining and supplying such information, and such information shall be made available to the MDEQ. Acceptable ASTM methodology, or its equivalent, shall be used.

Coke or Anthracite Coal Sampling Plan/Options
Michigan Sugar Company - Sebewaing Factory
Sebewaing, Michigan

The Michigan Department of Environmental Quality 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 Sebewaing 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 approved. Each is designed to give initial results for short term sampling. In the event the short term coke sampling results in a preliminary indication that the sulfur content of the coke exceeds permitted limits, then the Company may conduct a more rigorous five-day coke sampling protocol under Option A, 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, Sebewaing Factory (Sebewaing). These two options for a written coke sampling plan are designed to meet various environmental regulatory requirements.

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 Sebewaing 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 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.

Compliance Determination

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

If the option used suggests non-compliance the Company may elect to conduct a five day fuel sampling utilizing the protocol described in Option A of this Coke Sampling Plan, in which case the results from that

five day fuel sampling are to be used to determine compliance. The sample collected each day will be used to create a composite sample (following the protocol) that will be tested.

The MDEQ may request split samples for the five day fuel sampling, as well as a split sample of the composite sample.

OPTION A (Coke Pile Sampling)

SAMPLING PLAN:

Samples are to be taken from the coke pile at the factory. The following detailed sampling plan is to 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 prepared for transport to the analytical laboratory as described below.
   a. Pour out each grab sample and thoroughly mix them on a clean plastic sheet.
   b. Break sample pieces larger than 3 inches into smaller sizes.
   c. Make a pie shape with the entire composite sample and subdivide it into four equal parts.
   d. Separate one of the quarter samples as the first subset. Discard the other three quarters
   e. If this subset is too large for grinding, repeat the procedure until a suitable sized subset is obtained.
   f. If available grind the sample in a mill.
   g. Place the final sample into a new and clean zipper closure poly bag, again being careful to 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 and date the composite sample for transport to the laboratory. Complete the laboratory request form and a sample manifest per any laboratory instructions.

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 (Vendor Sampling)

The Company's coke vendor conducts sampling of the coke being supplied to the Company. The Company may use and rely upon such sampling as the initial indicator of the sulfur content of the coke being supplied to and fired by the Company if the procedure used for sampling is reasonably designed and implemented to give an accurate measure of the overall sulfur content of the coke. The Company will obtain from the vendor the process and procedure used in determining and supplying such information, and such information shall be made available to the MDEQ. Acceptable ASTM methodology, or its equivalent, shall be used.

Fuel Oil Sampling Plan/Options
Michigan Sugar Company - Sebewaing Factory
Sebewaing, Michigan

The Michigan Department of Environmental Quality has asked for a fuel oil sampling protocol that can be used whenever it desires a fuel oil sampling at the Sebewaing factory or requests that the company conduct the oil sampling.

Two options are being approved. Each is designed to give initial results for short term sampling. In the event the short term fuel oil sampling results in a preliminary indication that the sulfur content of the fuel oil exceeds permitted limits, then the Company may conduct a more rigorous five day fuel oil sampling protocol under either Option A or Option B, the results of which will be used for compliance purposes.

Introduction:

Fuel oil is used as a fuel supply to the CE Package Boiler and three pulp dryers at the Michigan Sugar Company, Sebewaing Factory (Sebewaing). These two options for a written fuel oil sampling plan are designed to meet various environmental regulatory requirements.

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 options were developed consistent with the site specific consideration and equipment arrangements at the Sebewaing Factory.

Oil Handling System Description:

Fuel oil is shipped to the site by truck and stored in 400,000 gallon fuel storage tank. The fuel oil tank is filled on an as needed basis. Generally at the start of the campaign it is nearly full or full. During the use of fuel it is continually heated and mixed. The mixing is achieved by pumping more fuel oil to the points of use than is needed. The excess is returned to the tank causing the mixing.

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. Measure sulfur concentration in fuel sample.

3. Convert concentrations into units of pounds of sulfur per MMBtu of heat content.

Acceptable ASTM methodology, or its equivalent, shall be used.

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.

Compliance Determination

The results of the sampling procedures set forth in either of the options set forth below may be used by MDEQ for compliance purposes if the Company does not request additional sampling as set forth below.

If the option used suggest non-compliance the Company may elect to conduct a 5-day fuel sampling utilizing the protocol describer in Option A, in which case the results from that 5-day fuel sampling are to be used to determine compliance. The sample collected each day will be used to create a composite sample (following the protocol) that will be tested.

The MDEQ may request split samples for the five day fuel sampling, as well as a split sample of the composite sample.

OPTION A (Fuel Oil Tank Sampling)

SAMPLING PLAN:

Samples may be taken from three different locations; in the fuel oil tank pump house, at the CE package boiler and in the pulp drier area. Unless and until sampling is performed, vendor supplied analyses may be utilized to demonstrate permit compliance provided it is representative of the fuel oil being delivered to Michigan Sugar Company. Due to the mixing of the fuel oil tank single grab samples are representative of the fuel being burned for a given time period unless more than 10% of the amount in the tank is being delivered during the time in question. If more than 10% of the tank's contents is delivered then daily samples will be taken and combined into a composite sample prior to analysis.

OPTION B (Vendor Sampling)

The Company's fuel oil vendor conducts sampling of the fuel oil being supplied to the Company. The Company may use and rely upon such sampling as the indicator of the sulfur content of the fuel oil being supplied to and fired by the Company if the procedure used for sampling is reasonably designed and implemented to give an accurate measure of the overall sulfur content of the fuel oil. The Company will obtain from the vendor the process and procedure used in determining and supplying such information, and such information shall be made available to the MDEQ. Acceptable ASTM methodology, or its equivalent, shall be used.

Appendix 10. Malfunction Abatement Plan

Malfunction Abatement Plan
[per AQD Rule 911]
Michigan Sugar Company - Sebewaing

General Background

The Factory Manager is responsible for all aspects of the sugar production process and maintenance of all factory equipment, including all air pollution control equipment. During the campaign the majority of the maintenance supervision is delegated to the Maintenance Manager. Depending on the nature of the mechanical problem all supervisory staff on-site may become involved.

Since it is very important to the factory to avoid breakdown of any kind, all of the intercampaign season (approximately 6-month period during the growing season) is dedicated to repairing, maintaining and improving the physical condition of all of the factory equipment. The goal of the summer activities is to avoid the need for this plan during the campaign (production period).

The goal of this plan is ensure the operation of air pollution control devices, especially for the major emission devices at the Sebewaing factory. The devices of most concern include the coal fired boilers and the pulp driers. The lime kiln has no controls of significance which are expected to ever have any issues. The remaining devices are small units (<30,000 cfm).

A general troubleshooting process description and flow chart are in Appendix A for use as a guide for situations outside of previous experience and this plan.

Boiler House:

Two people staff the boiler house during campaign. Their jobs are boiler operator and boiler house fireman. There is at least one person in the boiler house at all times during the campaign. During the inter-campaign these employees are responsible for ensuring all inspections and repairs are completed. They are to notify their supervisor when assistance is needed (for example: an Instrument Technician to inspect, repair and calibrate instruments). The supervisor arranges for additional staff.

During campaign three boilers are used. Boiler #2 and boiler #3 are coal fired. The third (#4) can run on either fuel oil or natural gas.

The two coal fired boilers, #2 & #3, are base loaded and generally run between 45,000 and 75,000 pounds per hour. Boiler #4 is used to pick up the swings in steam demand; running can be from idle to ~80,000 pounds per hour.

The summer boiler (boiler #1) is used for heating. This boiler runs on natural gas.

This section applies to air-cleaning devices on coal fired boilers No. 2 and No. 3.

1. Inter-campaign Activities (generally April to September)
    a. Boilers are cleaned and inspected every summer. The inspection includes the condition of each grate, the side wall and water tubes.
    b. Each of the multiclones are inspected. This includes checking for leaks, wall thickness of the clones and the condition of the inter-tubes.

c. Multiclones: All components are inspected.

i. Each clone is inspected for excessive wear and holes.

ii. Each exhaust tube (a.k.a. inter-tube or inter-clone) is inspected for wear and holes.

iii. Any component the above inspections reveal are unsatisfactory is replaced.

iv. Once every ten years all of the clones in a unit are replaced. Past experience has proven the components will last ten years or more.

d. The wet scrubber is thoroughly inspected each summer.

i. The damper in the venturi is inspected for wear.

ii. Each spray nozzle is checked for wear or dirt build-up.

iii. The over flow is cleaned if needed.

iv. All other components are checked for wear and signs abnormalities. Examples of abnormalities would be asymmetrical patterns which would indicate uneven air flow.

v. The monitoring equipment for flow and pressure drop are maintained and calibrated prior to campaign.

e. Other boiler instrumentation is checked and calibrated on boilers prior to campaign.

2. Campaign Activities

a. Particulate emissions are control by good combustion practices

i. Boiler #2 and boiler #3 are generally run at 0.0” - 0.10” W.C. draft. Combustion of coal is controlled by underfire and over fire air, and the coal feed rate.

ii. #2 & #3 boilers are base loaded to reduce swings. Constant fuel load helps control the emissions.

iii. Boiler operator generally controls the ash bed at 3” to 4”, however sometimes it may be reduced to 1” or increased to 6”. The operators periodically examine the firebox (wearing dark shaded eye protection) using their experience to determine the condition of the inside components of the boiler.

1. If abnormal conditions are determined to exist the operators will need to use their experience to determine if action is needed immediately or can wait. Action may be operational changes or shutting the boiler down to conduct repairs.

b. Each coal-fired boiler has two multi-clone fly ash collectors with Plattco dust valves installed. Dust collectors are visibly checked hourly to see that they are working correctly. In the event of a malfunction, actions are taken immediately to correct and the incident is logged on boiler sheet.

i. The ROP required stack visual emissions survey and multiclones monitoring are logged as required. This log sheet is turned in and kept for a period of five (5) years.

ii. As operations dictate, the boiler(s) are shutdown as necessary in response to malfunctions and needed repairs.

c. The pressure drop and flow parameters on the scrubber will be monitored as required by rule and by permit.

i. In the event a parameter is below the minimum indicating acceptable performance the operations of the scrubber will be investigated.

ii. In the event of a scrubber malfunction which causes excess emissions (or may cause excess emissions) the boiler will be shutdown for scrubber repairs unless the repair can be made on the fly, in which case all measures will be take to minimize particulate and other emissions.

iii. Records will be kept of scrubber malfunction events.

Boiler No. 4, CE boiler gas/oil fired

This boiler is the swing boiler used during campaign. It has no air-cleaning devices. As changes are made in steam flow requirements, boiler steam flow increases or decreases on demand. Normally run on automatic, steam demand is based on header pressure.

1. The instrument technicians calibrate and check the boiler every summer.
2. ROP required records of steam flow are recorded and kept for a minimum of five (5) years.
3. Samples are taken from fuel oil shipments, analyzed and kept for one year or the vendor data is used to demonstrate environmental compliance.
4. A log sheet is kept on this boiler and visual emissions are logged at least once per shift. This sheet is kept on file.

Pulp Drier Flue Gas Recirculation System (Three Dryers)

Two stacks. 1 stack for smaller #1 & #2 gas or fuel oil fired dryers. 1 stack for larger gas or fuel oil fired #3 dryer. Same technology, different size equipment.

The air cleaning devices consists of flue gas recirculation fan, multi-cyclone and rotary air lock. Purpose is to reduce stack emissions in drier area. Multiclone receives particulate from pulp drier, pellet mills and pellet coolers. Heavy particles drop from multiclone through a rotary airlock and back into the feed system. This is introduced back to the dry pulp system and used to make pellets.

Airborne particulate is pulled from multi-clone by recirculation fan and introduced back into furnace and burned in suspension.

27. An operator monitors temperature and furnace draft at all times.
28. Instrumentation is used to continuously measure the pressure drop across the multi-cyclone. Normal operating parameters between 3” to 12” W.C. Average is 4” to 5.5” W.C.
    a. If the pressure drop is below the lower end of the acceptable range the most common cause are plugged air lines or holes.
        i. Occasionally, the pressure gauge can lose accuracy. It can be checked with a liquid manometer. Replace the gauge if necessary.
        ii. Plugs can normally be removed by blowing air through the line (after disconnection of the pressure gauge).
        iii. If the issue is not solved by blowing air through the line then holes are the most likely cause. If the hole can be located and patched, do so. Since holes can be difficult to find total replacement of the air line frequently is the quickest and easiest solution.
    b. High end pressure readings are uncommon and may be more difficult to fix.
        i. Check the pressure gauge first and then air lines as described above
        ii. Other than measure errors high pressure may be a result of plugging in the multiclone, while rare it is a possibility that must be considered. Plugging of the multiclone may reduce the exhaust gas flow which may be indicated in the dryer drum monitoring or in the appearance of the plume from the stack (reduction of flow). Shut-down of the dryer(s) maybe needed to investigate and/or solving this issue.
29. Instrumentation records the return air volume flow rate of the flue gas recirculation (FGR) system; these records are kept for five (5) years. The acceptable range for the FGR is 5,000 to19,000 SCFM, the normal range is generally 7,000 to 13,000 SCFM. As a back-up to the direct measurement of the FGR flow rate a differential pressure gage has been installed to measure the change of pressure

caused by the FGR fan. Should the FGR flow meter fail the fan pressure will be used as an indicator of satisfactory operation.

a. If the range is exceeded after maintenance has been performed on the system, check to confirm reinstallation was completed properly.

b. Low readings after some successful operation are frequently the result of plugging. Clear the possible affected areas with pressurized air.

c. Signal delivery to the gauge's output should be checked.

d. Frequently, the electrical load of the fan motor will indicate if the issue maybe measurement or mechanical in nature. The manufacturer's guidelines for diagnosing mechanical issues.

30. Pulp drier is not run unless the flue gas recirculation system is fully operational.

31. A written log of pulp drier operation is kept on file for a period of five (5) years.

32. Pulp drier flue gas recirculation system is run within the acceptable parameters of the air quality division. If these conditions cannot be met the pulp drier is shut down.

Lime Kiln

There are four emission points from this unit, with no add on air-cleaning device.

Baghouses - General

Baghouses are highly effective air-cleaning/air pollution control devices. They are used at a number of locations throughout the factory. They need a minimal amount of monitoring to ensure proper operation.

For monitoring purposed each unit is equipped with a differential pressure monitor (a pressure gage of manometer). Except for start-up the measured pressure drop across a baghouse should be greater than one inch of water column (1" WC). A slow start-up may occur if the material flow through the emission unit is lower than normal. Normally, this is not a problem because even though the filter cake is missing (typical cause of low pressure drop) the load to the baghouse is low because of the small amount of material in the emission unit. Pressure drop will be monitored periodically. If the pressure drop is less than one inch of water, the baghouse will be inspected to determine if there has been a malfunction, and repaired as appropriate. If necessary, process equipment will be shut down until and while repairs are being made.

Replacement Parts Inventory

Certain key components are maintained within the company inventory or otherwise readily available from outside sources or vendors. These include:

- Multiclone components
- Primary motor for boiler wet scrubber
- Actuators
- Fans and motors for critical units

(i) GENERIC TROUBLESHOOTING PROCESS TO FIND ROOT CAUSE(S)

1. Problem (Deviation) Identified by Operator of Equipment

2. Operator of Equipment Troubleshoots to Find Root Cause(s)

3. Appropriate Hourly Leader and the Operator of the Equipment work together in Troubleshooting to Find Root Cause(s)

4. Shift Superintendent, appropriate Hourly Leader and the Operator of the Equipment work together in Troubleshooting to Find Root Cause(s)

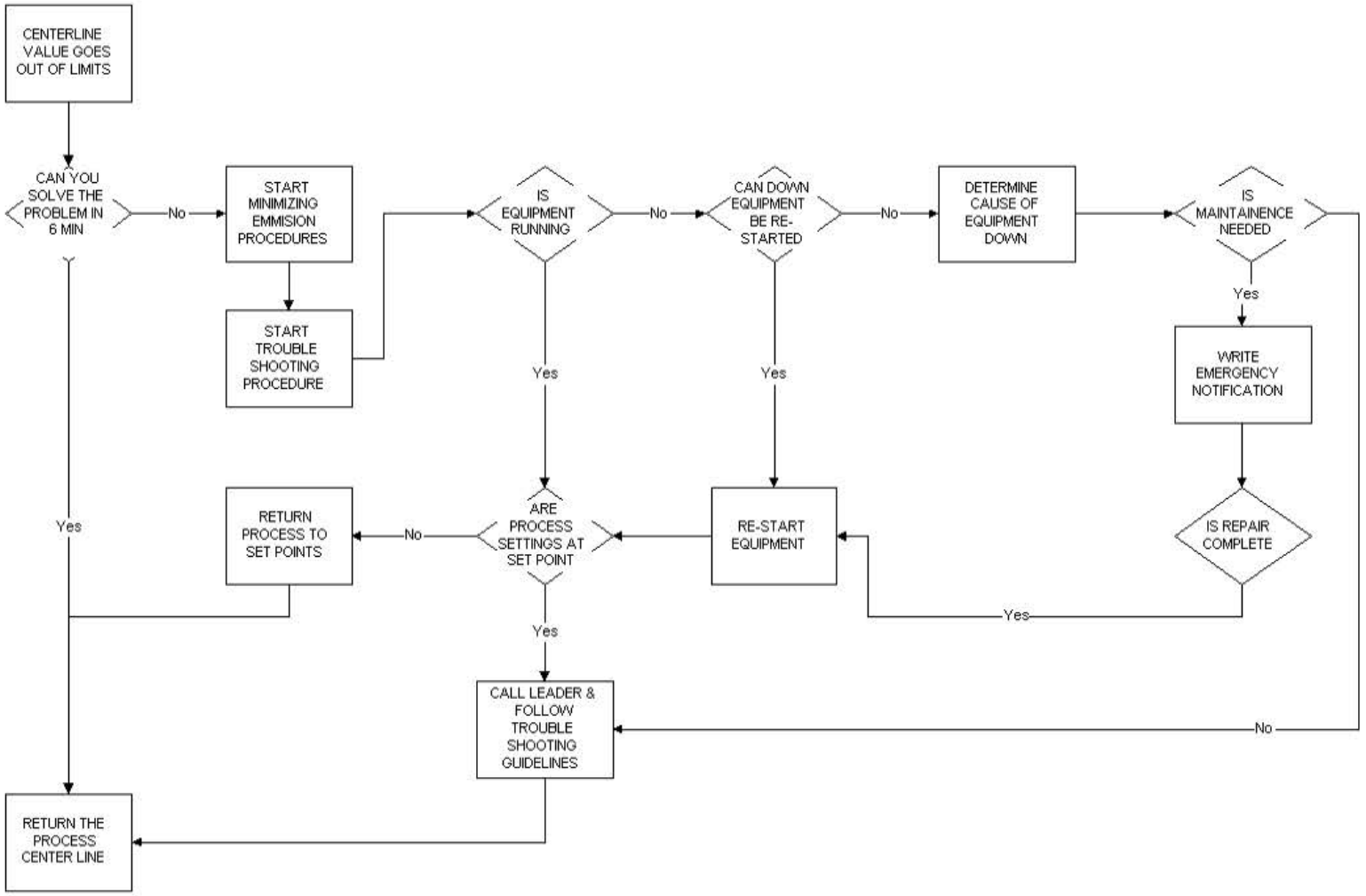
5. As needed the Assistant Maintenance Manager joins the Shift Superintendent, appropriate Hourly Leader and the Operator of the Equipment in Troubleshoots to Find Root Cause(s)

6. As needed the Maintenance Manager joins the Assistant Maintenance Manager, Shift Superintendent, appropriate Hourly Leader and the Operator of the Equipment in Troubleshooting to Find Root Cause(s)

7. None of the Above Steps should ever be skipped unless it is an Emergency

NOTE: WHEN FACED WITH A REQUEST FOR ANY ASSISTANCE BECAUSE OF A DEVIATION, THE SHIFT SUPERINTENDENT WILL ENSURE THAT THE STEPS ABOVE WERE PROPERLY COMPLETED PRIOR TO FULLFILLING THE REQUEST (SAVE EMERGENCIES)

MALFUNCTION ABATEMENT FLOW CHART



Appendix 11. Compliance Assurance Monitoring (CAM) Plan

Compliance Assurance Monitoring (CAM) Plan
Michigan Sugar Coal Fired Boiler

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-BOILERS.

I. BACKGROUND

The department has asserted CAM applies to particulate maHer emissions on the Coal Fired Boilers because pre-control potential emissions exceed 100 tons per year and a control device is used to reduce these emissions. CAM does not apply to emissions of SO_2 because there are no add-on control equipment for these emissions.

Emission Unit

Description: Two old coal fired boilers with an estimated heat input rating between 80 and 95 MMBtu/hr that fire coal. Equipped with multiclone/wet scrubber controls for particulate matter.

Identification: FG-BOILERS

Facility: Michigan Sugar Company - Sebewaing
Sebewaing, **MI**

Applicable Regulation, Emission Limit, Monitoring Requirements

Renewable Operating Permit No: MI-ROP-82873-2007

Emission Limits subject to CAM requirements:

Particulate Matter 0.451bs. per 1,000 pounds of exhaust gas, corrected to 50% excess air

Monitoring requirements: Once per day emission survey
Measure pressure drop across the mullidones once per shift
Measure pressure drop across the wet scrubber hourly Measure scrubber water flow hourly

Control Technology

Particulate emissions from the boiler are controlled by a multic!one and a venturi wet scrubber.

II. MONITORING APPROACH

The key elements of the monitoring approach for PM are presented in Table 1. Opacity will be used as one indicator for demonstrating compliance with the PM mass emission limit.

Table 1 Monitoring Approach – PM

A Opacity Indicator	Visible emissions (Opacity) will be monitored visually.
1 Opacity Indicator Range	An excursion is defined as any continuous reading exceeding 15% opacity for a six minute observation. Excursions trigger an investigation, corrective action and reporting requirement.
B Pressure Drop (multidone) across the mulliclones	Magnehelic® Differential Pressure Gauges {or a comparable device).
1 Pressure Gauge Range	An excursion is defined as any continuous reading during normal boiler operation outside of 1" to 12" of H_2O
C Pressure Drop (wet scrubber) across the venture scrubber throat	Magnehelic® Differential Pressure Gauges (or a comparable device).
1 Pressure Gauge Range	An excursion ls defined as any continuous reading during normal boiler operation below 15" of H_2O
D Water Flow (wet scrubber)	Mag meter or comparable in-line flow meter
1 Flow Meter Range	An excursion is defined as any continuous reading during normal boiler or scrubber operation below 100 gpm. Activation of the back-up spray systems is not considered normal operation. The back-up systems are designed to provide flows exceedin 100 qpm and are not measured.

III. PERFORMANCE CRITERIA

Table 2a Performance Criteria

	Visible Emissions (Opacity)
A. Data Representativeness	Observations are made at the point where the steam disappears. 15% opacity will represent non-normal operations. i.e. nozzle plugging or other obstruction or lack of particulate removal
B. Verification of Operational Status	Personnel will maintain Jog
C. *QNQC* Practices and Criteria	Readings during daylight hours only
D. Monitoring Frequency	At least once per day
E. Data Collection Procedure	Observer Jog.
F. Averaging Period	NA

Table 2b Per1ormance Criteria

	Pressure Drop {mulliclonesl
A. Data Representativeness	Readings below one inch represent worn multiclones. Readings above twelve inches will represent plugging or other obstructions.
B. Verification of Operational Status	Positive reading on pressure gauge indicates unit is operational.
C. QA/QC Practices and Criteria	Once per year the zero of each Magnehefic® Differential Pressure Gauge will be checked (during shut-down of the boiler(s). There are four gauges on four identical units. While the readings are not equal they do maintain a relationship. Should one (or more) gauge differ from the normal relationship of the group the gauges will be compared to a water manometer. Should a gauge fail a calibration it will be replaced.
D. Monitoring Frequency	Continuous except during maintenance or cleaning.
E. Data Collection Procedure	Recorded by operator(s) once per hour on a log and maintained for five years
F. Averaging Period	Instantaneous. No averaging.

Table 2c Performance Criteria

	Pressure Drop (wet scrubber)
A. Data Representativeness	Pressure drop of less than 15 inches indicates plugged nozzles or failed circulation pump.
B. Verification of Operational Status	Positive result on pressure gauge indicates it is operational
C. *QNQC* Practices and Criteria	Will follow manufacturer's published procedure Pressure Transmitter. Additionally, at least once per year the zero will be checked (during shut-down of the boiler(S)).
D. Monitoring Fre_quency	Monitored continuously by dedicated monitors.
E. Data Collection Procedure	Recorded by operator(s) on a log and *I* or data acquisition system once per hour and maintained for five years.
F. Averaging Period	No averaging.

Table 2d Performance Criteria

	Water Flow (wet scrubber)
A. Data Representativeness	Low scrubber now (below 100 gpm) indicates plugged nozzles or failed circulation pump. Measured on pipe between pump and spray nozzles. Separate lines exist for the tangential sprays and the center nozzle.
B. Verification of Operational Status	Once per year the zero of each mag. meters will be checked (during shut-down of the boiler(s)).
C. *QNQC* Practices and Criteria	Will follow manufacturer's published procedure for each meter.
D. Monitoring Frequency	Continuous
E. Data Collection Procedure	Hourly log by operator or continuously recorded by data acquisition system and maintained for five years.
F. Averaging Period	Instantaneous. No averaging.

V. JUSTIFICATION

Rationale for Selection of Performance Indicator

Opacity was selected as a performance indicator because it is indicative of good operation and maintenance of the Wet Scrubber. When a Wet Scrubber is operating properly, there will be minimal opacity from the slack of Boilers after the steam disappears. *Particulate emission test results historically indicate that the emission rate is well below the parUculate limit when the stack opacity is at or below 20%.*

Pressure drop across the multiclones was selected as a performance indicator because it is indicative of good operation of the units. The design efficiency of the multic!ones is shown in Figure 1. Because of the design of the system and experience with the units in this application no issues are expected when the Malfunction Abatement Plan is followed.

Estimated Efficiency at Various Pressure Drops

Modei9VC10T, Size 42-6, Multiclone® Collector

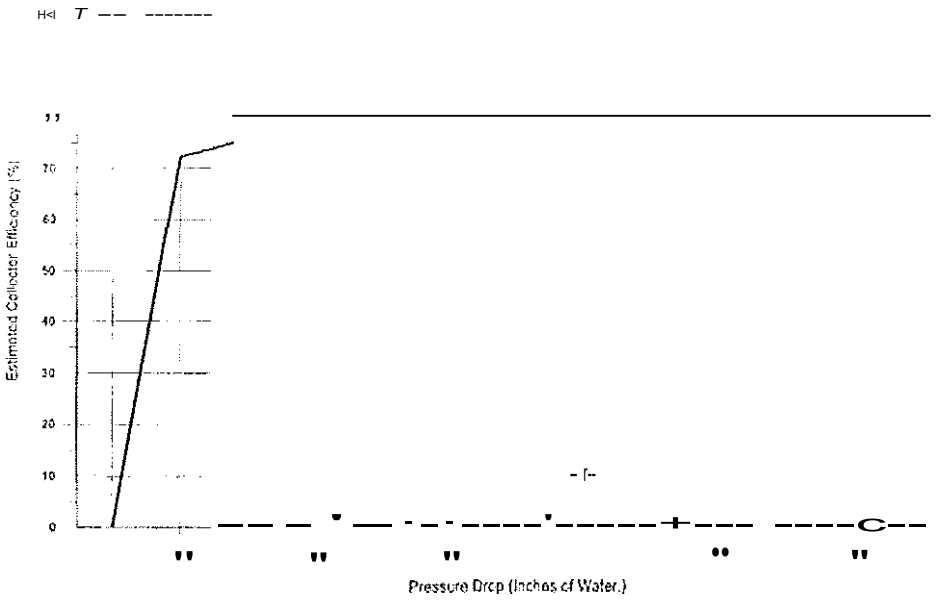


Figure 1

ESTIMATED EFFICIENCY AT VARIOUS PRESSURE DROPS

VENTURI SCRUBBER

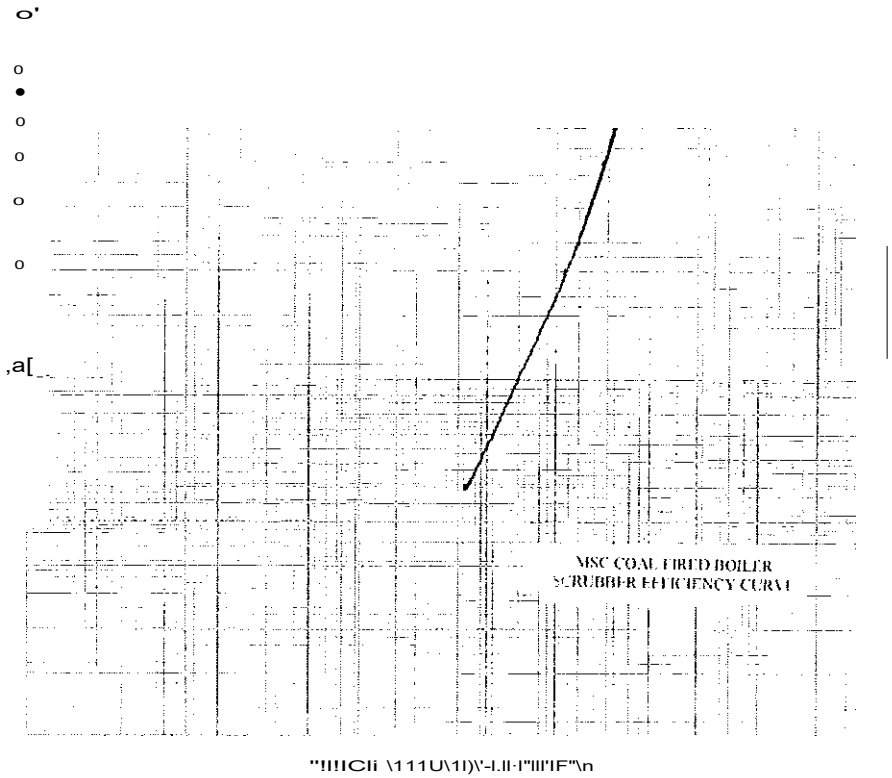


Figure 2

Pressure drop across the Wet Scrubber was selected as a performance indicator because it was reported by the manufacture as an indicative of good operation of the unit. Figure 2 is a graph supplied by the equipment designer.

Water Flow through the venturi was selected because it is important to the effectiveness of the scrubber. Its purpose is more toward conditioning the gas steam and the particulate matter.

Rationale for Selection of Indicator Range

The selected indicator range is more than one continuous hour exceeding 15% opacity. This indicates an unusual opacity event while maintaining compliance with the applicable opacity limit.

Performance Test

A January 2001 test indicated average PM emissions of 0.199#PM/1000# exhaust air corrected to 50% excess air {current limit is 0.45#PMI1000# exhaust air corrected to 50% excess air) correlating to an average opacity level of 15%. This test was performed prior to the installation of the wet scrubber. So under normal operations the emission limit can be met without the operation of the wet scrubber.

Compliance Assurance Monitoring (CAM) Plan

Michigan Sugar Rotary Pulp Dryer

I. BACKGROUND

The department has asserted CAM applies to particulate matter emissions on the Rotary Pulp Dryer because pre control potential emissions exceed 100 tons per year and a control device is used to reduce emissions. CAM does not apply to emissions of SO_2 because there are no add-on control equipment for these emissions.

Emission Unit

Description: Rotary Pulp Dryer with an estimated capacity of about 30 tons per hour of pressed pulp per hour. The Pulp Dryer furnace that fires natural gas, or fuel oil. Equipped with mullidones for particulate matter.

Identification: EUDRYER#3
EUPULPDRYER#1
EUPULPDRYER#2

Facility: Michigan Sugar Company- Sebewaing
Sebewaing, MI

Applicable Regulation, Emission Limit, Monitoring Requirements

Renewable Operating Permit No: MI·ROP·B2873·2007

Emission Limits subject to CAM requirements:
Particulate Matter 0.10 lbs. per 1,000 pounds of exhaust gas

Monitoring requirements: Once per day emission survey
Measure pressure drop across the multic!ones three times per shift minimum for compliance

Control Technology

Particulate emissions from each pulp dryer are controlled by a multic!one equipped with Flue Gas Recirculation (FGR).

II. MONITORING APPROACH

The key elements of the monitoring approach for PM are presented in Table 1. Opacity will be used as the primary performance indicator for demonstrating compliance with the PM mass emission limit.

Table 1 Monitoring Approach- PM

A Opacity Indicator	Visible emissions (Opacity) will be monitored visually.
1 Opacity Indicator Range	An excursion is defined as any continuous reading exceeding 15% opacity for a six minute observation period. Excursions trigger an investigation, corrective action and reporting requirement.
B Pressure Drop (multic!one} across the mulliclones	Magnehelic® Differential Pressure Gauges {or a comparable device).
1 Pressure Gauge Range	An excursion is defined as any continuous reading during normal pulp dryer operation outside of 3" to 12" of H_2O
C Flue Gas Recirculation (multiclone)	Magnehelic® Differential Pressure Gauges (or a comparable device).
1 Flue Gas Recirculation Range	An excursion is defined as any continuous reading during normal pulp dryer operation outside of flow of 5,000 to 19,000 SCFM.

III. PERFORMANCE CRITERIA

Table 2a Performance Criteria

	Visible Emissions (Opacity)
A. Data Representativeness	Observations are made at the point where the steam disappears. 15% opacity will represent non-normal operations. i.e. nozzle plugging or other obstruction or lack of particulate removal
B. Verification of Operational Status	Personnel will maintain log
C. *QA/QC* Practices and Criteria	Readings during daylight hours only
D. Monitoring Frequency	At least once per day
E. Data Collection Procedure	Observer log.
F. Averaging Period	NA

Table 2b Performance Criteria

	Pressure Drop (multIclones)
A. Data Representativeness	Readings below one inch represent worn muiliclones. Readings above twelve inches will represent plugging or other obstructions
B. Verification of Operational Status	Positive reading on pressure gauge indicates unit is operational.
C. QAfQC Practices and Criteria	Once per year the zero of each Magnehelic® Differential Pressure Gauge will be checked {during shut-down of the pul p dryer(s). Should a gauge fail il will be replaced.
D. Monitoring Frequency	Continuous except durinq maintenance or cleaning
E. Data Collection Procedure	Recorded by operator(s) once per hour on a log and maintained for five years. An excursion is defined as a missed reading. A deviation is defined as six excursions per shift.
F. Averaging Period	Instantaneous. No averaging.

Table 2c Performance Criteria

	Flue Gas Recirculation (multiclones)
A. Data Representativeness	Measurements are made in the duct at a location complia t wilh 40 CFR pari 60 Appendix A Method 1
B. Verification of Operational Status	Positive result
C. QAfQC Practices and Criteria	Once per year the zero of each meter will be checked {during shut-down of the pulp dryer(s). Annual calibration checks will be performed on the meter utilizing a pilot tube as per 40 CFR oar!60 Aooendix A Method 1.
D. Monitoring Frequency	Continuous
E. Data Collection Procedure	Recorded by operator(s) once per hour on a log and maintained for five years. An excursion is defined as a miss ed reading. A deviation is defined as six excursions per shift.
F. Averaging Period	Instantaneous. No averaging.

IV. QAIQC

The multiclone has been proven to be adequate to achieve compliance by compliance testing. This plan will be changed to reflect information gained during any future compliance testing.

V. JUSTIFICATION

Rationale for Selection of Performance Indicator

Opacity was selected as a performance indicator because it is indicative of good operation and maintenance of the Multiclone. *Particulate emission test results historically indicate that the emission rate is well below the particulate limit when the stack opacity is at or below 20% prior to the installation of the wet scrubber.*

Pressure drop across the multiclones was selected as a performance indicator because it is indicative of good operation of the units. The design efficiency of the multiclones is shown in

Figure 1. Because of the design of the system and experience with the units in this application no issues are expected when the Malfunction Abatement Plan is followed.

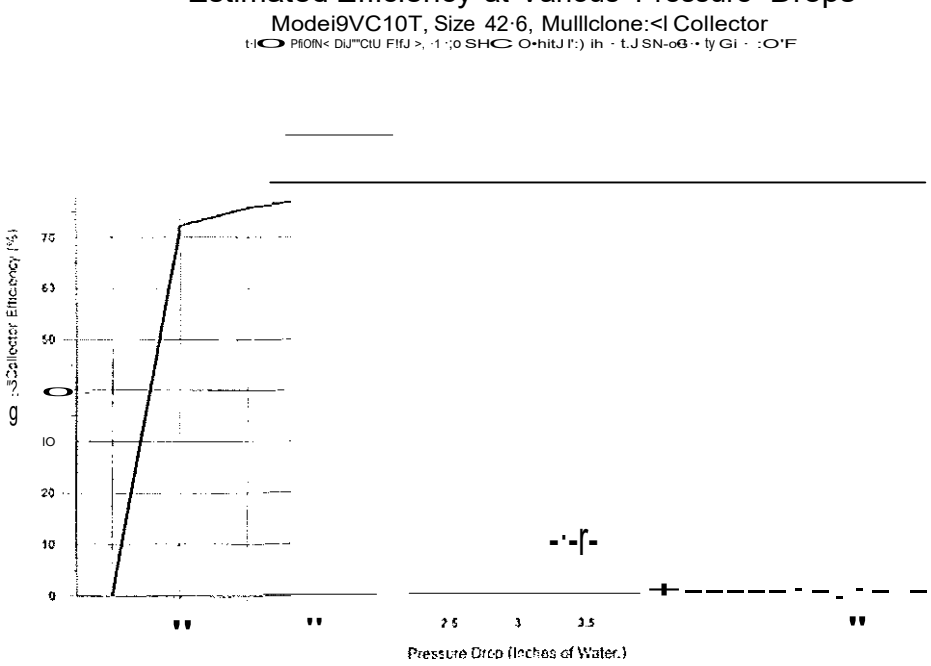


Figure 1

Rationale for Selection of Indicator Range

The selected indicator range is more than one continuous hour exceeding 15% opacity. This indicates an unusual opacity event while maintaining compliance with the applicable opacity limit.

The selected indicator range of the pressure drops is more than five minutes outside of the previously discussed ranges. The exception to this is periods when the Induced draft fan is not operating. If the fans are not running then no emissions will occur. In addition, it has been found that when the unit(s) are empty the multiclone pressure drops frequently are outside of normal operating ranges.

Performance Test

A January 2001 compliance test indicated average PM emissions of 0.038#PM/1000# exhaust air (current limit is 0.10#PM/1000# exhaust air) for the combined stack of EUPULPDRYER#1 and EUPULPDRYER#2. A January 2003 compliance test for EUDRYER#3 resull was 0.1O#PM/1000# exhaust air (current limit is 0.1O#PM/1000# exhaust air)

October 2, 2007