

Archived: Tuesday, October 10, 2023 5:44:09 PM

From: [Anu Nathan](#)

Sent: Fri, 6 Oct 2023 20:35:53

To: [EGLE-ROP Andrew Olfier Brothers, Monica \(EGLE\)](#)

Cc: [Eric Diring](#)

Subject: Westrock California, LLC (SRN B4072): ROP Renewal Application

Importance: Normal

Sensitivity: None

Attachments:

[WestRock_Battle_Creek_2023_ROP_Renewal_Signature.pdf](#) [BattleCreek_FacilityWidePTE_Sept 2023.pdf](#) [B4072 Final 05-15-19_highlighted changes.docx](#) [3rd boiler_PTI_Approval.pdf](#)

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Hello,

Please find attached the ROP renewal forms / documents for the above referenced facility. Please let Andrew or me know if you have any questions or need any additional information.

A signed copy of the entire submission will be submitted to the EGLE Kalamazoo District office as required.

Thanks.

Anu.

Anu Nathan, CHMM, CPEA, CSP

Senior Manager, Environmental Services



1000 Abernathy Road NE, Suite 125 | Atlanta, GA 30328

Office: 470-328-6398 | Mobile: 678-491-2845

anu.nathan@westrock.com | www.westrock.com

This electronic message contains information from WestRock Company (www.westrock.com) or its subsidiaries, which may be confidential, privileged or otherwise protected from disclosure. The information is intended to be disclosed to and used by only the named recipient(s). If you are not the intended recipient, then your review, use, disclosure, printing, copying, or distribution of this message or its contents is prohibited. If you have received this message in error, please notify WestRock immediately at postmaster@westrock.com, and delete the message from your system. For information about WestRock's privacy practices, including how WestRock collects, processes, transfers, and stores Personally Identifiable Information shared with us, please visit [WestRock Privacy Policy](#). Unless previously authorized in writing, this message does not constitute an offer, acceptance, or agreement of any kind. Sender is not liable for damage, errors or omissions related to or caused by transmission of this message. (c) WestRock Company.

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

EFFECTIVE DATE: May 15, 2019

ISSUED TO

WestRock California, LLC

State Registration Number (SRN): B4072

LOCATED AT

177 Angell Street, Battle Creek, Michigan 49015-1598

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B4072-2019

Expiration Date: May 15, 2024

Administratively Complete ROP Renewal Application Due Between
November 15, 2022 and November 15, 2023

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B4072-2019

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

Michigan Department of Environmental Quality

Rex Lane, Kalamazoo District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	3
A. GENERAL CONDITIONS.....	4
Permit Enforceability	4
General Provisions.....	4
Equipment & Design	5
Emission Limits.....	5
Testing/Sampling	5
Monitoring/Recordkeeping	6
Certification & Reporting	6
Permit Shield	7
Revisions	8
Reopenings.....	8
Renewals.....	9
Stratospheric Ozone Protection	9
Risk Management Plan.....	9
Emission Trading	9
Permit to Install (PTI)	10
B. SOURCE-WIDE CONDITIONS	11
C. EMISSION UNIT SPECIAL CONDITIONS	14
EMISSION UNIT SUMMARY TABLE.....	14
EU-COATING	16
EU-FIRE-PUMP-ENGINE	19
EU-REW-0001	23
D. FLEXIBLE GROUP SPECIAL CONDITIONS.....	25
FLEXIBLE GROUP SUMMARY TABLE.....	25
FG-COLDCLEANERS	26
FG-BOILERS.....	29
FG-PAPERMAKING	34
E. NON-APPLICABLE REQUIREMENTS	39
APPENDICES	40
Appendix 1. Acronyms and Abbreviations.....	40
Appendix 2. Schedule of Compliance.....	41
Appendix 3. Monitoring Requirements	41
Appendix 4. Recordkeeping	41
Appendix 5. Testing Procedures	41
Appendix 6. Permits to Install.....	41
Appendix 7. Emission Calculations	42
Appendix 8. Reporting	42
Appendix 9. Preventative Maintenance Plan.....	42

AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

SOURCE-WIDE CONDITIONS

DESCRIPTION

All process equipment source-wide including equipment covered by other permits, grandfathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 9.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI.2	R 336.1205(3)
2. Aggregate HAP	Less than 22.5 tpy ²	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI.2	R 336.1205(3)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall determine the HAP content of any material (e.g. coatings, washer liquids, etc.) as received and as applied, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311.² (R 336.1205(3))

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1205(3))
2. The permittee shall keep the following information on a calendar month basis:
 - a. The quantity of each HAP containing material used or emitted.

- b. The HAP emission factor of each HAP containing material used or emitted. (Emission factors are to be based on manufacturer's formulation data, testing, industry information (e.g. NCASI published emission factors), EPA emission factor, or as approved by the AQD District Supervisor.)
- c. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
- d. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month. For the first month following permit issuance, the calculations shall include the summation of emissions from the 11-month period immediately preceding the issuance date. For each month thereafter, calculations shall include the summation of emissions for the appropriate number of months prior to permit issuance plus the months following permit issuance for a total of 12 consecutive months.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the department upon request.² **(R 336.1205(3))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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).

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-COLDCLEANERS	Cold cleaner parts washers.	01-01-1948	FG-COLDCLEANERS
EU-BLR-0001	Springfield 1 steam generating boiler rated at 88.55 MMBtu/hr maximum rated heat input. Fuels: Natural gas is primary fuel source with back-up fuels No. 2 fuel oil, yellow grease, or No. 6 fuel oil. No control devices.	01-01-1948	FG-BOILERS
EU-BLR-0002	Springfield 2 steam generating boiler rated at 88.55 MMBtu/hr maximum rated heat input. Fuels: Natural gas is primary fuel source with back-up fuels No. 2 fuel oil, yellow grease, or No. 6 fuel oil. No control devices.	01-01-1948	FG-BOILERS
EU-BLR-003	ABCO steam generating boiler rated at 75 MMBTU/hr maximum rated heat input. Fuels: Natural gas	08-24-2023	FG-BOILERS
EU-STOCKPREP	Miscellaneous raw material mixing and processing vessels used in the preparation of the recycled paper fibers where various VOC containing additives are mixed in with the pulp slurry.	01-01-1948 01-01-1980 05-20-2013	FG-PAPERMAKING
EU-PAPERMACHINE	Five Beloit Belbond multi-ply formers for the wet end process with felt wash located under the wet end process of the paper machine, and a dry end where various coatings are applied and dried in natural gas-fired ovens. The finished paper is rolled onto a reel at the end of the paper machine.	01-01-1948 01-01-1980 05-20-2013	FG-PAPERMAKING
EU-COATING	Application of coating in the dry end of the paper machine includes the application of latex adhesive, which is used to bind the coating to the paperboard. Coatings are formulated from various liquids, slurries, solids, and dried in natural gas-fired ovens. Kaolin usage in paper process has a separate exhaust system for particulate.	01-01-1948 08-13-2008 05-20-2013	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-FIRE-PUMP-ENGINE	Emergency fire pump engine used to provide power to pump water for fire suppression or protection.	08-11-2009/ NA	NA
EU-REW-0001	Machine that performs the winding of the final product on to rolls for shipment (Building 23).	01-01-1948/ NA	NA

**EU-COATING
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Application of coating in the dry end of the paper machine includes the application of latex adhesive, which is used to bind the coating to the paperboard. Coatings are formulated from various liquids, slurries, solids, and dried in natural gas-fired ovens. Kaolin usage in paper process has a separate exhaust system for particulate.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOCs	6.9 tpy ²	12-month rolling time period as determined at the end of each calendar month	EU-COATING	SC VI.1, VI.2, VI.3	R 336.1702(a)
2. PM	0.10 lbs per 1000 lbs of exhaust gas ^{a2}	Hourly	SVCoatDry5 portion of EU-COATING	SC VI.4, VI.5	R 336.1331(1)(a)

^a Calculated on a wet gas basis

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-COATING with roller coating applicators or comparable technology with equivalent transfer efficiency.² (R 336.1702(a))

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1225, R 336.1702)

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep the following information on a calendar month basis for the coating portions of EU-COATING:
 - a. Quantity of each coating material used.
 - b. VOC content, percent by weight, of each coating material as applied.
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request.² **(R 336.1702)**
4. The permittee shall perform and record the results of a weekly 6-minute visible emission check of SVCoatDry5 during daylight hours under routine maximum operating conditions. The permittee shall record (yes or no) whether visible emissions are observed.² **(R 336.1301, R 336.1331)**
5. If visible emissions are observed during the weekly 6-minute check of SVCoatDry5, the permittee shall initiate a preventive maintenance check of EU-COATING within four hours to determine and correct for any noted abnormal operating conditions. **(R 336.1213(3))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCoatDry1	14 x 20 ²	60 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
2. SVCoatDry2*	16 x 30 ²	44 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
3. SVCoatDry3(IR)*	10 x 30 ²	48 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
4. SVCoatDry4*	36 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
5. SVCoatDry5**	24 x 27 ²	49 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)

* Horizontal Discharge, ** Goose Neck Downward

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**EU-FIRE-PUMP-ENGINE
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Emergency fire pump engine used to provide power to pump water for fire suppression or protection.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	7.8 g/HP-hr	Hourly	EU-FIRE-PUMP-ENGINE	SC V.1 or VI.2	40 CFR 60.4205(c)
2. CO	3.7 g/HP-hr	Hourly	EU-FIRE-PUMP-ENGINE	SC V.1 or VI.2	40 CFR 60.4205(c)
3. PM	0.6 g/HP-hr	Hourly	EU-FIRE-PUMP-ENGINE	SC V.1 or VI.2	40 CFR 60.4205(c)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4205 over the entire life of EU-FIRE-PUMP-ENGINE. **(40 CFR 60.4206)**
2. The permittee shall maintain and operate EU-FIRE-PUMP-ENGINE per the manufacturer’s emission related written instructions. **(40 CFR 60.4211(a)(1))**
3. The permittee shall operate EU-FIRE-PUMP-ENGINE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for EU-FIRE-PUMP-ENGINE to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 40 CFR 60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. There is no time limit on the use of EU-FIRE-PUMP-ENGINE in emergency situations. **(40 CFR 60.4211(f), 40 CFR 60.4211(f)(1))**

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

V. TESTING/SAMPLING

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

1. Within 180 days after issuance of this permit, the permittee shall verify NMHC + NOx, CO, and PM emission rates from EU-FIRE-PUMP-ENGINE by testing at owner's expense, in accordance with the department requirements or provide manufacturer certification documentation as required in SC VI.2. If testing is to be performed, it shall be done using an approved USEPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD approved test protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211)**

2. The permittee shall verify the NMHC + NOx, CO, and PM emission rates from EU-FIRE-PUMP-ENGINE, at a minimum, every five years from the date of the last test or maintain manufacturer certification documentation as required in SC VI.2. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. Section 63.6590(c) of 40 CFR Part 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)) provides that any affected source subject to the Subpart ZZZZ criteria in 40 CFR 63.6590(c) is subject to 40 CFR Part 60, Subpart IIII for compression ignition engines. Therefore, the permittee shall comply with 40 CFR Part 63, Subpart ZZZZ by complying with all the applicable provisions of the federal Standards of Performance for New Stationary Sources for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII. **(40 CFR Part 60, Subparts A and IIII, 40 CFR 63.6590(c))**

Footnotes:

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

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

**EU-REW-0001
EMISSION UNIT CONDITIONS**

DESCRIPTION

A machine that performs the winding of final product onto rolls for shipment (Building 23).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.10 lb / 1000 lbs of exhaust gas	Hourly	EU-REW-0001	SC VI.1, VI.2	R 336.1331(1)(a), Table 31J

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall perform and record the results of a weekly six-minute visible emission check of SV-REW-001 during daylight hours under routine maximum operating conditions and during start-up conditions. The permittee shall record (yes or no) whether visible emissions are observed. (R 336.1213(3))
2. If visible emissions are observed during the weekly 6-minute check of SV-REW-0001, the permittee shall initiate a preventive maintenance check of EU-REW-0001 within four hours to determine and correct for any noted abnormal operating conditions. (R 336.1213(3))

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-REW-0001*	22 X 15	27.7	R 336.1213(3)

*Stack is discharged horizontally.

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA 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-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h), or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU-COLDCLEANERS
FG-BOILERS	Two natural gas fired boilers with back-up fuels as No. 2 fuel oil, yellow grease and No. 6 fuel oil. Maximum rated heat input for each boiler is 88.55 MMBTU per hour . One natural gas fired boiler. Maximum rated heat input is 75 MMBTU per hour.	EU-BLR-0001 EU-BLR-0002 EU-BLR-0003
FG-PAPERMAKING	Boxboard production including pulping and the wet end process on the paper machine including felt wash.	EU-STOCKPREP EU-PAPERMACHINE

FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Emission Unit: EU-COLDCLEANERS

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
 - a. A serial number, model number, or other unique identifier for each cold cleaner.
 - b. The date the unit was installed, manufactured or that it commenced operation.
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).
 - d. The applicable Rule 201 exemption.
 - e. The Reid vapor pressure of each solvent used.
 - f. If applicable, the option chosen to comply with Rule 707(2).
3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

**FG-BOILERS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two natural gas fired boilers with back-up fuels as No. 2 fuel oil, yellow grease, and No. 6 fuel oil with a maximum rated heat input for each boiler is **88.55 MMBTU per hour** and one natural-gas only fired boiler with a maximum rated heat input of 75 MMBTU per hour.

Emission Units: EU-BLR-0001, EU-BLR-0002, EU-BLR-0003

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Particulate	0.049 lb / MMBtu* ²	Hourly	EU-BLR-0001	SC V.1	R 336.1205(3)
2. Particulate	0.049 lb / MMBtu* ²	Hourly	EU-BLR-0002	SC V.1	R 336.1205(3)

* When firing yellow grease

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel Oil	1.5% Sulfur by weight ²	Instantaneous	FG-BOILERS	SC V.4, V.5	R 336.1401
2. Yellow Grease	16,000 tons ²	Per 12-Month Rolling Time Period	FG-BOILERS	SC VI.5	R 336.1205(3)

3. The boiler shall comply with the definition of the oil subcategory: the boiler burns any liquid fuel and is not in either the biomass or coal subcategories. **(40 CFR 63, 63.11200(c), 40 CFR 63.11237)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. FG-BOILERS shall only be fired with pipeline quality natural gas, as defined in 40 CFR 72.2, yellow grease and/or fuel oil.² **(R 336.1201(3))**
2. The maximum annual fuel usage for Boiler #3 is 621.4 MMSCF/year.
3. The permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to 40 CFR Part 63, Subpart JJJJJJ that applies to the permittee's boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 of 40 CFR Part 63, Subpart JJJJJJ satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement. **(40 CFR 63.11201(b))**

4. The permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of 40 CFR 63.11223, as listed below. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. **(40 CFR 63.11223(b))**
 - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.11223(b)(1))**
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.11223(b)(2))**
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.11223(b)(3))**
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. **(40 CFR 63.11223(b)(4))**
 - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.11223(b)(5))**
 - f. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of 40 CFR 63.11223, as listed below. **(40 CFR 63.11223(b)(6))**
 - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(i))**
 - ii. A description of any corrective actions taken as a part of the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(ii))**
 - iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. **(40 CFR 63.11223(b)(6)(iii))**
 - g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b)(7))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The boiler shall have a heat input capacity of equal to or greater than 10 MMBTU per hour. **(40 CFR Part 63, Subpart JJJJJ)**

V. TESTING/SAMPLING

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

1. When firing yellow grease, the permittee shall verify particulate matter emission rates from EU-BLR-0001 and EU-BLR-0002 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(40 CFR 52.21, R 336.1201(3), R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

2. When firing yellow grease, the permittee shall verify the particulate matter emission rates from EU-BLR-0001 and EU-BLR-0002, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**
4. Testing of fuel sulfur content, in weight percent, of oil in storage tank shall be done either by supplier or laboratory analysis. Fuel sulfur testing shall use the appropriate ASTM test method or an approved equivalent test method. If using purchase records for ASTM specification fuel oil or analysis provided by the vendor to show compliance with the above fuel sulfur content limit, the permittee shall verify the fuel oil sulfur content, by testing, at least once per calendar year. **(R 336.1213(3))**
5. Fuel oil sulfur content test results, including the test method used, shall be submitted to the AQD within 60 days of the test date. **(R 336.2001(5))**

See Appendix 5

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall record the monthly natural gas usage rates in million cubic feet. **(R 336.1213(3))**
2. The permittee shall record the monthly fuel oil usage rates in gallons. **(R 336.1213(3))**
3. The permittee shall keep a record of the sulfur content, by weight, of each delivery of fuel oil. The sulfur content determination shall be done either by supplier certification or laboratory analysis.² **(R 336.1201(3))**
4. The permittee shall keep a record of the monthly yellow grease fuel usage, in gallons, for FG-BOILERS. All records shall be compiled at the end of each calendar month.² **(40 CFR 52.21, R 336.1201(3))**
5. The permittee shall keep a record of annual yellow grease fuel usage in tons per year, based on a 12-month rolling time period for FG-BOILERS. All records shall be compiled at the end of each calendar month.² **(40 CFR 52.21, R 336.1201(3))**
6. To ensure proper operation when firing fuel oil or yellow grease, the permittee shall perform and record the results of a daily 6-minute visible emission check of SV-BLR-0001 and SV-BLR-0002 during daylight hours as specified in Appendix 3.A. **(R 336.1213(3))**
7. The permittee must maintain the records specified in paragraphs (c)(1) through (7) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(c))**
 - a. As required in 40 CFR 63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. **(40 CFR 63.11225(c)(1))**
 - b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 40 CFR 63.11223 as specified in paragraphs (c)(2)(i) and (iii) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(c)(2))**
 - i. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. **(40 CFR 63.11225(c)(2)(i))**
 - iii. For each boiler required to conduct an energy assessment, the permittee must keep a copy of the energy assessment report. **(40 CFR 63.11225(c)(2)(iii))**
 - c. Records of the occurrence and duration of each malfunction of the boiler. **(40 CFR 63.11225(c)(4))**

- d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), stated in SC IX.3, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **(40 CFR 63.11225(c)(5))**
8. The permittee's records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. **(40 CFR 63.11225(d))**

See Appendices 3 and 9

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The permittee must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of 40 CFR 63.11225. For boilers that are subject only to a requirement to conduct a biennial tune-up according to 40 CFR 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial compliance report as specified in paragraphs (b)(1) and (2) of 40 CFR 63.11225, as listed below. **(40 CFR 63.11225(b))**
 - a. Company name and address. **(40 CFR 63.11225(b)(1))**
 - b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The permittee's notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.11225(b)(2))**
 - i. "This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." **(40 CFR 63.11225(b)(2)(i))**
 - ii. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.11225(b)(2)(ii))**
6. If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within 40 CFR Part 63, Subpart JJJJJJ, in the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJJ, or in the boiler switching out of 40 CFR Part 63, Subpart JJJJJJ due to a change to 100 percent natural gas, or the permittee has taken a permit limit that resulted in the permittee being subject to 40 CFR Part 63, Subpart JJJJJJ, the permittee must provide notice of the date upon which the permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: **(40 CFR 63.11225(g))**

- a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. **(40 CFR 63.11225(g)(1))**
- b. The date upon which the fuel switch, physical change, or permit limit occurred. **(40 CFR 63.11225(g)(2))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-BLR-0001	NA	117 ¹	R 336.1901
2. SV-BLR-0002	NA	117 ¹	R 336.1901
3. SV-BLR-0003	NA	117	R 336.1901

IX. OTHER REQUIREMENT(S)

- 1. 40 CFR Part 63, Subpart JJJJJJ applies to each existing affected source as defined in paragraph (a)(1) of 40 CFR 63.11194, as listed below. **(40 CFR 63.11194(a))**
 - a. The affected source of 40 CFR Part 63, Subpart JJJJJJ is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in 40 CFR 63.11200 and defined in 40 CFR 63.11237, located at an area source. **(40 CFR 63.11194(a)(1))**
- 2. An affected source is an existing source if the permittee commenced construction or reconstruction of the affected source on or before June 4, 2010. **(40 CFR 63.11194(b))**
- 3. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.11205(a))**
- 4. For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within 40 CFR Part 63, Subpart JJJJJJ or the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJJ, the permittee must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to 40 CFR 63.11225(g), stated in SC VII.8. **(40 CFR 63.11210(h))**
- 5. Table 8 to 40 CFR Part 63, Subpart JJJJJJ shows which parts of the General Provisions in 40 CFR 63.1 through 40 CFR 63.15 apply to the permittee. **(40 CFR 63.11235)**

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).

**FG-PAPERMAKING
FLEXIBLE GROUP CONDITIONS**

Boxboard production including pulping and the wet end process on the paper machine including felt wash.

Emission Units: EU-STOCKPREP, EU-PAPERMACHINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	30.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	Pulping and wet end portion of FG-PAPERMAKING	SC VI.1, VI.3, VI.4	R 336.1702(a)
2. VOC	0.7 tpy ²	12-month rolling time period as determined at the end of each calendar month	Felt wash portion of FG-PAPERMAKING	SC VI.1, VI.2, VI.5	R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Maximum Paper Production	219,000 tpy ²	12-month rolling time period as determined at the end of each calendar month	FG-PAPERMAKING	SC VI.1, VI.3	R 336.1205(1)(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² **(R 336.1205, R 336.1225, R 336.1702)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1225, R 336.1702)**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period paper production records for FG-PAPERMAKING. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205(1)(a))**
4. The permittee shall keep the following information on a calendar month basis for the FG-PAPERMAKING:
 - a. Pounds of paper produced.
 - b. The National Council for Air and Steam Improvement emission factors or emission factors acceptable to the AQD District Supervisor may be used for calculating VOC emissions.
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

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

5. The permittee shall keep the following information on a calendar month basis for the felt washing portion of FG-PAPERMAKING:
 - a. Quantity of each felt wash material used.
 - b. VOC content of each felt wash material as applied.
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the department upon request.² **(R 336.1702)**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
Stock Preparation Area Stacks/Vents			
1. SVStkPrep1	48 ²	57 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
2. SVStkPrep2	48 ²	57 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
3. SVStkPrep3	48 ²	57 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
4. SVStkPrepN*	48 ²	33 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
5. SVStkPrepS*	54 ²	26 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
6. SVStkPrepE*	48 ²	46 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
7. SVStkPrepW*	54 ²	46 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
Wet-End Area Vents			
8. SVBBW0001	48 ²	65 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
9. SVBBW0002	48 ²	65 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
10. SVBBW0003	48 ²	65 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
11. SVBBW0004	48 ²	63 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
12. SVBBW0005	48 ²	63 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
Dry-End Area Stacks/Vents			
13. SVBBD0001*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
14. SVBBD0002*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
15. SVBBD0003*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
16. SVBBD0004*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
17. SVBBD0005*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
18. SVBBD0006*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
19. SVBBD0007*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
20. SVBBD0008*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
21. SVBBD0009*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
22. SVBBD0010*	42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
23. SVBBD0011*	42 x 42 ²	36 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
24. SVBBD0012	48 ²	64 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
25. SVBBD0013	48 ²	63 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)
26. SVBBD0014	48 ²	64 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21(c) and (d)

* Horizontal Discharge

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).

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. Acronyms and Abbreviations

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

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

A. Monitoring Requirements for FG-BOILERS

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in the FG-BOILERS table when firing fuel oil or yellow grease unless an alternative format is approved by the AQD District Supervisor:

1. The permittee shall perform and record the results of a 6-minute visible emission check of SV-BLR-0001 and SV-BLR-0002 immediately after each start-up occurrence. For each 24-hour period that fuel oil or yellow grease is continuously fired, then the permittee shall perform and record the results of a six-minute visible emission check of SV-BLR-0001 and SV-BLR-0002 during maximum routine operating conditions. **(R 336.1213(3))**
2. If visible emissions are observed at start-up or during maximum routine operating conditions, the permittee shall then perform and record the results of a 6-minute visible emission check of SV-BLR-0001 and/or SV-BLR-0002 at least once every 30 minutes thereafter, until visible emissions are no longer observable or until visible emissions are observable for more than two hours. **(R 336.1213(3))**
3. If visible emissions are still noticeable within two hours of the initial observance, the permittee shall proceed with the Preventative Maintenance Plan included in Appendix 9A. **(R 336.1213(3))**

NOTE: The purpose of the 6-minute visible emission check is to verify (yes or no) whether visible emissions are observed. Therefore, the permittee should record a positive or a negative response for each visible emission check that is performed.

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B4072-2019. 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-B4072-2014a is being reissued as Source-Wide PTI No. MI-PTI-B4072-2019.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
120-22		Boiler #3	FG-BLR-0003

Appendix 7. Emission Calculations

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

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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

Appendix 9. Preventative Maintenance Plan

A. Preventative Maintenance Plan for FG-BOILERS

Any request by the permittee to change the Preventative Maintenance Plan in Appendix 9 must be submitted in writing to the AQD District Supervisor for review and approval. **(R 336.1213(3))**

If visible emissions are observed for more than two hours using the methods set forth in Appendix 3.A., the permittee shall implement the following procedures:

1. Stop firing fuel oil or yellow grease and convert to firing natural gas or perform and record the results of a Federal Reference Test Method 9 visible emission observation of SV-BLR-0001 and/or SV-BLR-0002 within two hours.
2. Whatever option is chosen in (1) above, the permittee shall determine the cause of visible emissions within two hours of discovery, identify possible corrective measures within eight hours and implement the most practically feasible corrective measures which will reduce/eliminate visible emissions.
3. If a Federal Reference Test Method 9 visible emission observation is performed and indicates a violation of the opacity standard specified in R 336.1301 (See General Condition No. 11.), the permittee shall immediately notify the AQD as required in General Condition No. 11; or stop firing fuel oil or yellow grease and convert to firing natural gas.
4. If a Federal Reference Test Method 9 visible emission observation is performed and indicates that the opacity from FG-BOILERS is in compliance with R 336.1301, then the permittee may continue to fire fuel oil or yellow grease and continue with the schedule of daily 6-minute visible emission checks.

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Facility-Wide Potential to Emit: Criteria Pollutants

Summary							
Emission Unit	VOCs (tpy)	SO2 (tpy)	NOx (tpy)	PM (Total) (tpy)	PM₁₀	PM_{2.5}	CO (tpy)
Boiler Emissions (FG-Boilers) + Boiler 3 (Includes Boiler Treatment Chemicals)	12.42	1218.04	259.48	103.96	63.92	42.49	76.04
Insignificant Activities Emissions	3.40	0.37	61.75	4.69	4.69	4.69	51.87
Emergency Fire Pump Engine Emissions	6.91E-02	5.64E-02	8.53E-01	6.05E-02			1.84E-01
Chemical Usages (Paper Machine and Stock Preparation)	30.02						
Latex Application (EU-COAT)	6.90						
Felt Wash	0.14						
TOTAL	52.95	1218.47	322.08	108.72	68.62	47.18	128.09

WestRock
Battle Creek, Michigan
 Permit No.: MI-ROP-B4072-2019a
 Facility-Wide HAP Potential to Emit

Summary							
HAP	Boiler Emissions: FG-Boilers (Includes Boiler Treatment Chemicals) (tpy)	Insignificant Activities Emissions (tpy)	Emergency Fire Pump Engine Emissions (tpy)	Chemical Usages (Paper Machine and Stock Preparation)	Latex Application (EU-COAT)	Felt Wash	Totals (tpy)
1,1,1-Trichloroethane	1.31E-03	--	--	--	--	There are no HAPs in the two felt washes utilized at the facility	1.31E-03
1,3-Butadiene	--	--	7.53E-06	--	--		7.53E-06
Acetaldehyde	--	--	1.48E-04	1.66E+00	6.40E-01		2.30E+00
Acrolein	--	--	1.78E-05	--	--		1.78E-05
Benzene	2.27E-03	1.30E-03	1.80E-04	--	--		3.75E-03
Biphenyl	--	--	--	2.05E+00	--		2.05E+00
Butyl Acrylate	--	--	--	--	4.62E-02		4.62E-02
Carbon Disulfide	--	--	--	5.27E-01	--		5.27E-01
Chloroform	--	--	--	2.67E-01	--		2.67E-01
Cumene	--	--	--	2.51E-01	--		2.51E-01
Dichlorobenzene	1.30E-03	7.41E-04	--	--	--		2.04E-03
Ethylbenzene	3.52E-04	0.00E+00	--	--	--		3.52E-04
Formaldehyde	2.07E-01	4.63E-02	2.27E-04	1.04E-01	--		3.58E-01
Hexane	1.95E+00	1.11E+00	--	--	--		3.06E+00
Methanol	--	--	--	2.79E+00	--		2.79E+00
Methylene Chloride	--	--	--	3.73E-01	--		3.73E-01
Naphthalene	3.54E-02	3.77E-04	--	8.53E-02	--		1.21E-01
PAH	6.04E-04	2.07E-04	3.23E-05	--	--		8.44E-04
Phenol	--	--	--	6.77E-01	--		6.77E-01
Propionaldehyde	--	--	--	6.79E-02	--		6.79E-02
Styrene	--	--	--	--	1.71E-03		1.71E-03
Toluene	2.33E-03	2.10E-03	7.87E-05	4.97E-01	--		5.01E-01
Vinyl Acetate	--	--	--	--	4.97E-01		4.97E-01
Xylenes	4.82E-03	0.00E+00	5.49E-05	--	--	4.88E-03	
Metals							
Anitmony	7.97E-03	--	--	--	--	There are no HAPs in the two felt washes utilized at the facility	7.97E-03
Arsenic	1.56E-02	1.24E-04	--	--	--		1.58E-02
Beryllium	2.41E-03	7.41E-06	--	--	--		2.42E-03
Cadmium	4.38E-01	6.79E-04	--	--	--		4.38E-01
Chromium	1.16E-02	8.65E-04	--	--	--		1.25E-02
Cobalt	2.75E+00	5.19E-05	--	--	--		2.75E+00
Lead	7.97E-03	0.00E+00	--	--	--		7.97E-03
Manganese	1.56E-02	2.35E-04	--	--	--		1.59E-02
Mercury	2.41E-03	1.61E-04	--	--	--		2.57E-03
Nickel	4.38E-01	1.30E-03	--	--	--		4.39E-01
Selenium	1.16E-02	1.48E-05	--	--	--		1.17E-02
Totals	5.91	1.17	7.46E-04	9.35	1.18		17.61

Note: The maximum HAP emission is taken from the combustion of No. 2 fuel oil, No. 6 fuel oil or natural gas. Total HAPs are taken from the worst-case combustion of the fuels. See detailed boiler HAP calculations for details.

Minor Source Status		
All Individual HAPs <10 tpy?	Total HAP <25 tpy?	Minor Source of HAP?
Yes	Yes	Yes

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Boilers: Potential to Emit

Note: WestRock currently operates two boilers (EU-BLR-0001 and EU-BLR-0002) rated at a maximum heat input capacity of 107 MMBtu/hr each (214 MMBtu/hr total). The boilers are capable of firing natural gas, No.2 or No.6 fuel oil and yellow grease. According to the MSDS for yellow grease, it contains no hazardous substances. Additionally, AP-42 has no representative emission factors for yellow grease. It is safe to assume that the combustion of yellow grease will not result in higher HAP emissions than the combustion of other fuel types. The individual pollutant emissions are taken from the fuel type that results in the highest emissions.

Fuel Information						
Fuel Type	Maximum Heat Input	Units	Heating Value	Units	Maximum Usage/Year	Units
No. 2 Fuel Oil	177,100,000	Btu/hr	140,000	Btu/Gallon	11,081.40	10 ³ Gallons/Year
No. 6 Fuel Oil	177,100,000	Btu/hr	150,000	Btu/Gallon	10,342.64	10 ³ Gallons/Year
Natural Gas	177	MMBtu/hr	1,020	Btu/scf		

Notes: Heat values from No. 2 and No. 6 Fuel Oils are from AP-42 Chapter 1.3 and the heat value of Natural Gas is from AP-42 Chapter 1.4.

No. 2 Fuel Oil Combustion Emissions			
Pollutant	Emission Factor (lb/10 ³ gallon)	Maximum Yearly Usage (10 ³ gallons)	Emissions (tpy)
VOC	0.556	11,081.40	3.08
SO ₂ *	71	11,081.40	393.39
NOx	24	11,081.40	132.98
PM (total)	2	11,081.40	11.08
PM ₁₀	3.3	11,081.40	18.28
PM _{2.5}	2.55	11,081.40	14.13
CO	5	11,081.40	27.70

EF for SO₂ = 142*S (Sulfur content of the fuel oil used as 0.5%)

HAPs	Emission Factor (lb/10 ³ gallon)	Maximum Yearly Usage (10 ³ gallons)	Emissions (tpy)
Benzene	2.14E-04	11,081.40	1.19E-03
Ethylbenzene	6.36E-05	11,081.40	3.52E-04
Formaldehyde	3.30E-02	11,081.40	1.83E-01
Naphthalene	1.13E-03	11,081.40	6.26E-03
PAH	6.06E-05	11,081.40	3.36E-04
1,1,1-Trichloroethane	2.36E-04	11,081.40	1.31E-03
Toluene	6.20E-03	11,081.40	3.44E-02
o-Xylene	1.09E-04	11,081.40	6.04E-04
Metals			
Arsenic	5.60E-04	11,081.40	3.10E-03
Beryllium	4.20E-04	11,081.40	2.33E-03
Cadmium	4.20E-04	11,081.40	2.33E-03
Chromium	4.20E-04	11,081.40	2.33E-03
Lead	1.26E-03	11,081.40	6.98E-03
Mercury	4.20E-04	11,081.40	2.33E-03
Manganese	8.40E-04	11,081.40	4.65E-03
Nickel	4.20E-04	11,081.40	2.33E-03
Selenium	2.10E-03	11,081.40	1.16E-02
Total			2.65E-01

Notes: Emission factors are from AP-42, Chapter 1.3, Tables 1.3-1, 1.3-2, and 1.3-3 for Fuel Oil Combustion.

Emission factors for VOC were assumed to be equal to that of TOC and retrieved from AP-42, Chapter 1.3, Table 1.3-3. HAP Emission Factors were taken from Table 1.3-9-Emission Factors for Speciated Organic Compounds from Fuel Oil Combustion and Table 1.3-10: Emission Factors for Trace Elements from Distillate Fuel Oil Combustion

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Boilers: Potential to Emit

No. 6 Fuel Oil Combustion Emissions			
Pollutant	Emission Factor (lb/10 ³ gallon)	Maximum Yearly Usage (10 ³ gallons)	Emissions (tpy)
VOC	1.605	10,342.64	8.30
SO2	235.5	10,342.64	1217.85
NOx	47	10,342.64	243.05
PM (total)	19.63	10,342.64	101.52
PM ₁₀	11.89	10,342.64	61.48
PM _{2.5}	7.74	10,342.64	40.04
CO	5	10,342.64	25.86

Notes: Emission factors are from AP-42, Chapter 1.3, Tables 1.3-1, and 1.3-3, and 1.3-5 for industrial boilers. VOC is assumed to be equal to that of TOC.

PM10 = 7.17 (A) and PM2.5 = 4.57 (A) where A = 1.12(S)+0.37; Sulfur content (S) assumed as 1.5% per the permit limit. Total PM = PM10+PM2.5

HAPs	Emission Factor (lb/10 ³ gallon)	Maximum Yearly Usage (10 ³ gallons)	Emissions (tpy)
Benzene	2.14E-04	10,342.64	1.11E-03
Ethylbenzene	6.36E-05	10,342.64	3.29E-04
Formaldehyde	3.30E-02	10,342.64	1.71E-01
Naphthalene	1.13E-03	10,342.64	5.84E-03
PAH	6.06E-05	10,342.64	3.13E-04
1,1,1-Trichloroethane	2.36E-04	10,342.64	1.22E-03
Toluene	6.20E-03	10,342.64	3.21E-02
o-Xylene	1.09E-04	10,342.64	5.64E-04
Metals			
Antimony	5.25E-03	10,342.64	2.71E-02
Arsenic	1.32E-03	10,342.64	6.83E-03
Beryllium	2.78E-05	10,342.64	1.44E-04
Cadmium	3.98E-04	10,342.64	2.06E-03
Chromium	8.45E-04	10,342.64	4.37E-03
Cobalt	6.02E-03	10,342.64	3.11E-02
Lead	1.51E-03	10,342.64	7.81E-03
Manganese	3.00E-03	10,342.64	1.55E-02
Mercury	1.13E-04	10,342.64	5.84E-04
Nickel	8.45E-02	10,342.64	4.37E-01
Selenium	6.83E-04	10,342.64	3.53E-03
Total			7.48E-01

Notes: HAP Emission Factors were taken from Table 1.3-9-Emission Factors for Speciated Organic Compounds from Fuel Oil Combustion and Table 1.3-11-Emission Factors for Metals from No. 6 Fuel Oil Combustion (May 2010).

Natural Gas Combustion Emissions				
Pollutant	Emission Factor (lbs/MMscf)	Emission Factor (lbs/MMBtu)	Maximum Heat Input (MMBtu/hr)	Emissions (tons/yr)
VOC	5.5	5.39E-03	177.1	4.18
SO2	0.6	5.88E-04	177.1	0.46
NOx	100	9.80E-02	177.1	76.05
PM (total)	7.6	7.45E-03	177.1	5.78
PM ₁₀	7.6	7.45E-03	177.1	5.78
PM _{2.5}	7.6	7.45E-03	177.1	5.78
CO	84	8.24E-02	177.1	63.88
Lead	0.0005	4.90E-07	177.1	0.0004

HAPs	Emission Factor (lbs/MMscf)	Emission Factor (lbs/MMBtu)	Maximum Heat Input (MMBtu/hr)	Emissions (tons/yr)
Benzene	2.10E-03	2.06E-06	177.1	1.60E-03
Dichlorobenzene	1.20E-03	1.18E-06	177.1	9.13E-04
Formaldehyde	7.50E-02	7.35E-05	177.1	5.70E-02
Hexane	1.80E+00	1.76E-03	177.1	1.37E+00
Naphthalene	6.10E-04	5.98E-07	177.1	4.64E-04
PAH	8.82E-05	8.65E-08	177.1	6.71E-05
Toluene	3.40E-03	3.33E-06	177.1	2.59E-03
Metals				
Arsenic	2.00E-04	1.96E-07	177.1	1.52E-04
Beryllium	1.20E-05	1.18E-08	177.1	9.13E-06
Cadmium	1.10E-03	1.08E-06	177.1	8.37E-04
Chromium	1.40E-03	1.37E-06	177.1	1.06E-03
Cobalt	8.40E-05	8.24E-08	177.1	6.39E-05
Manganese	3.80E-04	3.73E-07	177.1	2.89E-04
Mercury	2.60E-04	2.55E-07	177.1	1.98E-04
Nickel	2.10E-03	2.06E-06	177.1	1.60E-03
Selenium	2.40E-05	2.35E-08	177.1	1.83E-05
Total				1.44E+00

Notes: Emission factors for VOC were retrieved from AP-42, Chapter 1.4, Table 1.4-2. Assumed PM and PM2.5 emissions are equal to PM10 emissions. HAP Emission factors were taken from Table 1.4-3-Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4-Emission Factors for Metals from Natural Gas Combustion (July 1998).

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Boilers: Potential to Emit

Maximum Emissions	
HAPs	Emissions (tons/yr)
1,1,1,-Trichloroethane	1.31E-03
Benzene	1.60E-03
Dichlorobenzene	9.13E-04
EthylBenzene	3.52E-04
Formaldehyde	1.83E-01
Hexane	1.37E+00
Naphthalene	6.26E-03
PAH	3.36E-04
Toluene	3.44E-02
Xylene	6.04E-04
Metals	
Antimony	2.71E-02
Arsenic	6.83E-03
Beryllium	2.33E-03
Cadmium	2.33E-03
Chromium	4.37E-03
Cobalt	3.11E-02
Lead	7.81E-03
Manganese	1.55E-02
Mercury	2.33E-03
Nickel	4.37E-01
Selenium	1.16E-02
Total	2.15

Notes: Maximum emissions of each HAP were taken from either No. 2 fuel oil, No. 6 fuel oil or natural gas.

Criteria Pollutants Maximum Emissions (tpy)	Fuel
8.30 VOC	No. 6 Fuel Oil
1217.85 SO2	No. 6 Fuel Oil
243.05 NOx	No. 6 Fuel Oil
101.52 PM	No. 6 Fuel Oil
61.48 PM ₁₀	No. 6 Fuel Oil
40.04 PM _{2.5}	No. 6 Fuel Oil
63.88 CO	Natural Gas

Boiler Treatment Chemical Usage VOC Emissions
 There are no chemicals used in the boiler water treatment system that contain HAPs. There is only one chemical used in the boiler water treatment which contains VOCs. Potential VOC emissions from this product is based on actual usages applied to the maximum potential production of 600 tons/day.

2022 Average Actual Usage	12,000	lbs
Ave Finished Product Produced	147,000	tons
Usage Factor	0.082	lb/ton
VOC wt %	21.00%	
Maximum Emission Factor (with 25% safety factor applied)	0.102	lb/ton
Potential to Emit VOCs	2.35	tons/year

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Boiler 3: Potential to Emit

Boiler 3 - Natural Gas only (60,000 lbs/hr)

Fuel Information						
Fuel Type	Maximum Heat Input	Units	Heating Value	Units	Maximum Usage/Year	Units
No. 2 Fuel Oil	0	Btu/hr	140,000	Btu/Gallon	0.00	10 ³ Gallons/Year
No. 6 Fuel Oil	0	Btu/hr	150,000	Btu/Gallon	0.00	10 ³ Gallons/Year
Natural Gas	75	MMBtu/hr	1,020	Btu/scf		

Notes: Heat values from No. 2 and No. 6 Fuel Oils are from AP-42 Chapter 1.3 and the heat value of Natural Gas is from AP-42 Chapter 1.4.

Natural Gas Combustion Emissions				
Pollutant	Emission Factor (lbs/MMscf)	Emission Factor (lbs/MMBtu)	Maximum Heat Input (MMBtu/hr)	Emissions (tons/yr)
VOC	5.5	5.39E-03	75.0	1.77
SO ₂	0.6	5.88E-04	75.0	0.19
NO _x		5.00E-02	75.0	16.43
PM (total)	7.6	7.45E-03	75.0	2.45
PM ₁₀	7.6	7.45E-03	75.0	2.45
PM _{2.5}	7.6	7.45E-03	75.0	2.45
CO		3.70E-02	75.0	12.15
Lead	0.0005	4.90E-07	75.0	0.0002

HAPs	Emission Factor (lbs/MMscf)	Emission Factor (lbs/MMBtu)	Maximum Heat Input (MMBtu/hr)	Emissions (tons/yr)
Benzene	2.10E-03	2.06E-06	75.0	6.76E-04
Dichlorobenzene	1.20E-03	1.18E-06	75.0	3.86E-04
Formaldehyde	7.50E-02	7.35E-05	75.0	2.42E-02
Hexane	1.80E+00	1.76E-03	75.0	5.80E-01
Naphthalene	6.10E-04	5.98E-07	75.0	1.96E-04
PAH	8.82E-05	8.65E-08	75.0	2.84E-05
Toluene	3.40E-03	3.33E-06	75.0	1.10E-03
Metals				
Arsenic	2.00E-04	1.96E-07	75.0	6.44E-05
Beryllium	1.20E-05	1.18E-08	75.0	3.86E-06
Cadmium	1.10E-03	1.08E-06	75.0	3.54E-04
Chromium	1.40E-03	1.37E-06	75.0	4.51E-04
Cobalt	8.40E-05	8.24E-08	75.0	2.71E-05
Manganese	3.80E-04	3.73E-07	75.0	1.22E-04
Mercury	2.60E-04	2.55E-07	75.0	8.37E-05
Nickel	2.10E-03	2.06E-06	75.0	6.76E-04
Selenium	2.40E-05	2.35E-08	75.0	7.73E-06
Total				6.08E-01

Notes: Emission factors for VOC were retrieved from AP-42, Chapter 1.4, Table 1.4-2. Assumed PM and PM_{2.5} emissions are equal to PM₁₀ emissions. HAP Emission factors were taken from Table 1.4-3-Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4-Emission Factors for Metals from Natural Gas Combustion (July 1998).

Maximum Emissions	
HAPs	Emissions (tons/yr)
1,1,1,-Trichloroethane	0.00E+00
Benzene	6.76E-04
Dichlorobenzene	3.86E-04
EthylBenzene	0.00E+00
Formaldehyde	2.42E-02
Hexane	5.80E-01
Naphthalene	1.96E-04
PAH	2.84E-05
Toluene	1.10E-03
Xylene	0.00E+00
Metals	
Antimony	0.00E+00
Arsenic	6.44E-05
Beryllium	3.86E-06
Cadmium	3.54E-04
Chromium	4.51E-04
Cobalt	2.71E-05
Lead	1.61E-04
Manganese	1.22E-04
Mercury	8.37E-05
Nickel	6.76E-04
Selenium	7.73E-06
Total	0.61

Notes: Maximum emissions of each HAP were taken from either No. 2 fuel oil, No. 6 fuel oil or natural gas.

Criteria Pollutants Maximum Emissions (tpy)	Fuel
1.77 VOC	Natural Gas
0.19 SO ₂	Natural Gas
16.43 NO _x	Natural Gas
2.45 PM	Natural Gas
2.45 PM ₁₀	Natural Gas
2.45 PM _{2.5}	Natural Gas
12.15 CO	Natural Gas

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Insignificant Activities: Combustion Sources

Emission Unit	Description	Total Heat Input (MMBtu/hr.)	Notes
EU-COAT-DRY-001	Dryers & Ovens	32.632	Active
EUHBLR002	Boiler	0.100	Active
EUSPH0002	Space Heater	0.175	Active
EUSPH0003	Space Heater	0.200	Active
EUSPH0004	Space Heater	0.200	Active
EUSPH0005	Space Heater	0.200	Active
EUSPH0006	Make-Up Air Unit	7.425	Active
EUSPH0007	Make-Up Air Unit	7.425	Active
EUSPH0008	Make-Up Air Unit	2.170	Active
EUSPH0009	Make-Up Air Unit	10.000	Heat input is not listed in the IA list of the permit. Conservatively, 10 MMBtu/hr. is assumed.
EUSPH0012	Make-Up Air Unit	10.000	Heat input is not listed in the IA list of the permit. Conservatively, 10 MMBtu/hr. is assumed.
EUSPH0013	Make-Up Air Unit	10.000	Heat input is not listed in the IA list of the permit. Conservatively, 10 MMBtu/hr. is assumed.
EUSPH0014	Make-Up Air Unit	10.000	Heat input is not listed in the IA list of the permit. Conservatively, 10 MMBtu/hr. is assumed.
EUSPH0015	Space Heater	1.000	Active
EUSPH0016	Space Heater	0.080	Active
EUSPH0017	Space Heater	0.200	Active
EUSPH0018	Space Heater	2.000	Active
AMU-PH-0001	Make-Up Air Unit	10.000	Active
AMU-PH-0002	Make-Up Air Unit	10.000	Active
AMU-PH-0003	Make-Up Air Unit	10.000	Active
AMU-PH-0004	Make-Up Air Unit	10.000	Active
AMU-PH-0005	Make-Up Air Unit	10.000	Active
	Total Heat Input =	143.807	

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Insignificant Activities: Potential to Emit

Fuel Information				
Fuel Type	Maximum Heat Input	Units	Natural Gas Heating Value	Units
Natural Gas	143.8	MMBtu/hr	1,020	Btu/scf

Notes: The heat value of natural gas is from AP-42 Chapter 1.4.

Natural Gas Combustion Emissions				
Pollutant	Emission Factor (lbs/MMscf)	Emission Factor (lbs/MMBtu)	Maximum Heat Input (MMBtu/hr)	Emissions (tons/yr)
VOC	5.5	5.39E-03	143.8	3.40
SO ₂	0.6	5.88E-04	143.8	0.37
NO _x	100	9.80E-02	143.8	61.75
PM	7.6	7.45E-03	143.8	4.69
CO	84	8.24E-02	143.8	51.87
Lead	0.0005	4.90E-07	143.8	0.0003

HAPs	Emission Factor (lbs/MMscf)	Emission Factor (lbs/MMBtu)	Maximum Heat Input (MMBtu/hr)	Emissions (tons/yr)
Benzene	2.10E-03	2.06E-06	143.8	1.30E-03
Dichlorobenzene	1.20E-03	1.18E-06	143.8	7.41E-04
Formaldehyde	7.50E-02	7.35E-05	143.8	4.63E-02
Hexane	1.80E+00	1.76E-03	143.8	1.11E+00
Naphthalene	6.10E-04	5.98E-07	143.8	3.77E-04
PAH	3.36E-04	3.29E-07	143.8	2.07E-04
Toluene	3.40E-03	3.33E-06	143.8	2.10E-03
Metals				
Arsenic	2.00E-04	1.96E-07	143.8	1.24E-04
Beryllium	1.20E-05	1.18E-08	143.8	7.41E-06
Cadmium	1.10E-03	1.08E-06	143.8	6.79E-04
Chromium	1.40E-03	1.37E-06	143.8	8.65E-04
Cobalt	8.40E-05	8.24E-08	143.8	5.19E-05
Manganese	3.80E-04	3.73E-07	143.8	2.35E-04
Mercury	2.60E-04	2.55E-07	143.8	1.61E-04
Nickel	2.10E-03	2.06E-06	143.8	1.30E-03
Selenium	2.40E-05	2.35E-08	143.8	1.48E-05
Total				1.17

Notes: Emission factors for VOC were retrieved from AP-42, Chapter 1.4, Table 1.4-2. HAP Emission factors were taken from Table 1.4-3-Emission Factors for Speciated Organic Compounds from Natural Gas Combustion and Table 1.4-4-Emission Factors for Metals from Natural Gas Combustion (July 1998).

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Emergency Fire Pump Engine: Potential to Emit

Engine Information		
Mechanical Output	110	Brake Horsepower (BHP)
Brake Specific Fuel Consumption	7,000	Btu/BHP
Fuel Combusted	Diesel	
Hours Operated/Year	500	

Diesel Fuel Combustion Emissions			
Pollutant	Emission Factor (lb/MMBtu)	Emission Factor (lb/HP-hr)	Emissions (tpy)
VOC	0.36	2.51E-03	6.91E-02
SO ₂	0.29	2.05E-03	5.64E-02
NO _x	4.41	3.10E-02	8.53E-01
PM	0.31	2.20E-03	6.05E-02
CO	0.95	6.68E-03	1.84E-01

HAP	Emission Factor (lb/MMBtu)	Emission Factor (lb/HP-hr)	Emissions (tpy)
1,3-Butadiene	3.91E-05	2.74E-07	7.53E-06
Acetaldehyde	7.67E-04	5.37E-06	1.48E-04
Acrolein	9.25E-05	6.48E-07	1.78E-05
Benzene	9.33E-04	6.53E-06	1.80E-04
Formaldehyde	1.18E-03	8.26E-06	2.27E-04
Toluene	4.09E-04	2.86E-06	7.87E-05
Xylenes	2.85E-04	2.00E-06	5.49E-05
PAH	1.68E-04	1.18E-06	3.23E-05
Total			7.46E-04

Notes: Emission factors for VOC were conservatively estimated to equal TOC and were taken from AP-42 Table 3.3-1. HAP emission factors are from AP-42 Table 3.3-2. Speciated Organic Compound Emission Factors for Uncontrolled Diesel Engines. Lb/hp-hr emission factors are calculated by multiplying the lb/MMBtu emission factor by 7000 Btu/hp (per AP-42 guidance) and then dividing by 1,000,000. Fire Pump engine is for emergency use only. Therefore, maximum potential emissions are based on 500 hours per year of operation per USEPA's Memorandum Calculating Potential to Emit (PTE) for Emergency Generators, dated September 6, 1995 from John Seitz to the Directors of Regions I - X. Although the USEPA memorandum pertains to emergency generators, the diesel engine fire pump is also only used during an emergency and routine testing, and the monitoring allowances afforded by this memorandum can also be applied to this emergency diesel engine.

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

NCASI Emission Factors

The emission factor data outlined below is taken from the National Council for Air & Stream Improvement (NCASI) Master Summary Table of NCASI Emissions Factors for Pulp and Paper Mills - Air Toxics / Criteria Pollutants, Updated October 2015.

Paper Machine Emission Factors from 100% Recycled Paper Machines

Air Toxic	lb/ADTFP
Acetaldehyde	1.33E-02
Biphenyl	1.76E-02
Carbon Disulfide	2.88E-03
3-Carene	1.23E-04
Chloroform	2.29E-03
Cumene	2.21E-03
p-Cymene	5.07E-03
1,2-Dimethoxyethane	1.27E-03
Formaldehyde	7.62E-04
Limonene	1.39E-03
Methanol ¹	2.17E-02
Methyl Ethyl Ketone	3.49E-05
Methylene Chloride	3.09E-03
Naphthalene	7.50E-04
Phenol	5.61E-03
Alpha-Pinene	5.38E-04
Beta-Pinene	2.70E-03
Propionaldehyde	4.38E-04
Toluene	2.59E-03
VOCs	2.53E-01

Notes: ADTFP = Air Dry Ton of Finished Product

Stock Preparation Emission Factors from OCC and Recycled

Air Toxic	lb/ADTP
1,2-Dimethoxyethane	3.93E-05
Acetaldehyde	1.16E-03
Biphenyl	3.80E-04
Carbon Disulfide	1.58E-03
Chloroform	4.98E-05
Formaldehyde	1.38E-04
Methanol	2.53E-03
Methylene Chloride	1.68E-04
Phenol	3.07E-04
Propionaldehyde	1.43E-04
Toluene	1.60E-03
VOCs	9.83E-03

Notes: ADTP = Air Dry Ton of Recycled Pulp

¹ Revised NCASI emission factor removing the outlier fourdrinier paper machine which is not representative of the paper machine utilized at WestRock. In this paper making process, the recycled pulp is first bleached with hydrogen peroxide and sodium hydrosulfite. This bleaching is expected to result in additional methanol generation which will then be trapped in the pulp going forward to the machine. WestRock does not do any preliminary bleaching of their product; therefore, it is appropriate and necessary to remove this outlier

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Paper Machine and Stock Preparation Emissions

Potential Production Rate/Year:	600	tons
Site-Specific Moisture Content:	6.5%	
Moisture Adjustment to Air Dried Tons Finished Product (ADTFP):	10.0%	
Maximum Potential Paper Production/Day:	623.33	ADTFP
Maximum Potential Paper Production/Year:	227,517	ADTFP

Note: The facility has the potential to produce up to 600 tons of finished product per day at 6.5% moisture, but NCASI emission factors are evaluated against ADTFP, which is conservatively assumed to be 10% moisture.

Paper Machine (EU-PAPER MACHINE) Emissions:

Air Toxic	Tons/Year	CAS #	Federal HAP?
Acetaldehyde	1.51	75-07-0	Yes
Biphenyl	2.00	92-54-4	Yes
Carbon Disulfide	0.33	75-15-0	Yes
3-Carene	0.01	13466-78-9	No
Chloroform	0.26	67-66-3	Yes
Cumene	0.25	98-82-8	Yes
p-Cymene	0.58	99-87-6	No
1,2-Dimethoxyethane	0.14	110-71-4	No
Formaldehyde	0.09	50-00-0	Yes
Limonene	0.16	5989-27-5	No
Methanol	2.47	67-56-1	Yes
Methyl Ethyl Ketone	0.004	78-93-3	No
Methylene Chloride	0.35	75-09-2	Yes
Naphthalene	0.09	91-20-3	Yes
Phenol	0.64	108-95-2	Yes
Alpha-Pinene	0.06	80-56-8	No
Beta-Pinene	0.31	127-91-3	No
Propionaldehyde	0.05	123-38-6	Yes
Toluene	0.29	108-88-3	Yes
Total HAPs	8.33		
VOCs	28.78		

Maximum Potential Recycled Pulp Processed/Day:	692.59	ADTP
Maximum Potential Recycled Pulp Processed/Year:	252,796	ADTP

Note: As illustrated in this application, a 10% shrinkage factor was conservatively applied to the potential ADTFP/day to account for the additional raw material (fiber or recycled pulp) that is utilized in the system.

Stock Preparation (EU-STOCKPREP) Emissions:

Air Toxic	Tons/Year	CAS #	Federal HAP?
1,2-Dimethoxyethane	4.97E-03	110-71-4	No
Acetaldehyde	1.47E-01	75-07-0	Yes
Biphenyl	4.80E-02	92-54-4	Yes
Carbon Disulfide	2.00E-01	75-15-0	Yes
Chloroform	6.29E-03	67-66-3	Yes
Formaldehyde	1.74E-02	50-00-0	Yes
Methanol	3.20E-01	67-56-1	Yes
Methylene Chloride	2.12E-02	75-09-2	Yes
Phenol	3.88E-02	108-95-2	Yes
Propionaldehyde	1.81E-02	123-38-6	Yes
Toluene	2.02E-01	108-88-3	Yes
Total HAPs	1.02		
VOCs	1.24		

Total Emissions from Paper Machine and Stock Preparation

Air Toxic	Tons/Year	CAS #	Federal HAP?
Acetaldehyde	1.66	75-07-0	Yes
Biphenyl	2.05	92-54-4	Yes
Carbon Disulfide	0.53	75-15-0	Yes
3-Carene	0.01	13466-78-9	No
Chloroform	0.27	67-66-3	Yes
Cumene	0.25	98-82-8	Yes
p-Cymene	0.58	99-87-6	No
1,2-Dimethoxyethane	0.15	110-71-4	No
Formaldehyde	0.10	50-00-0	Yes
Limonene	0.16	5989-27-5	No
Methanol	2.79	67-56-1	No
Methyl Ethyl Ketone	0.00	78-93-3	Yes
Methylene Chloride	0.37	75-09-2	Yes
Naphthalene	0.09	91-20-3	Yes
Phenol	0.68	108-95-2	Yes
Alpha-Pinene	0.06	80-56-8	No
Beta-Pinene	0.31	127-91-3	No
Propionaldehyde	0.07	123-38-6	Yes
Toluene	0.50	108-88-3	Yes
Total HAPs	9.35		
VOCs	30.02		

WestRock
Battle Creek, Michigan
Permit No.: MI-ROP-B4072
Coating Emissions

EU-COAT		
Potential Paper Production	600	tons/day
Potential Days of Operation	365	days/year
Latex Usages (total)	25	lb/ton
Maximum Hourly Production	31.25	tons/hr
Polyco 3960		
	Wt. %	
Acetaldehyde	0.0187%	187.1 ppm
Vinyl Acetate	0.0145%	145.2 ppm
VOC	0.286%	

Comments

Dry product - Planned to use 70% Polyco and 30% Ligos

Dow's residual monomer data

Ligos P 7311 (used only for Rod Coating)		
	Wt. %	
Butyl acrylate	0.0027%	
Styrene	0.0001%	
2-Ethylhexyl acrylate	0.0001%	<1 ppm
Ethyl acrylate	0.0001%	<1 ppm
Methyl methacrylate	0.0001%	<1 ppm
VOC wt %	0.05%	

Currently on-trial. Included to evaluate the TACs screening.

Only volatile & toxic pollutants are reported. Other product constituents are not volatile (see attached SDS)

Potential to Emit

Pollutant	CAS #	lbs/hr	tpy
VOC		1.3450	5.89
TACs			
Acetaldehyde	75-07-0	0.1462	0.64
Vinyl Acetate		0.1134	0.497
Butyl acrylate	141-32-2	0.0105	0.05
Styrene	100-42-5	0.0004	0.002
2-Ethylhexyl acrylate	103-11-7	0.0004	0.002
Ethyl acrylate	140-88-5	0.0004	0.002
Methyl methacrylate	80-62-6	0.0004	0.002

70% Polyco and 30% Ligos

Conservatively assumed as using 100% Polyco 3960 for the hourly max.

Conservatively assumed as using 100% Polyco 3960 for the hourly max.

Conservatively assumed as using 50% Ligos

1.19

*The maximum hourly emission rate of each TAC listed above was based on the maximum daily potential production rate of paper at 750 tons per day. This represents an overly conservative estimate of the daily maximum capacity assuming uninterrupted operation the mill could achieve for all grades of paper based on the current configuration of the paper machine and dryer. The annual average production for 2017-2020 this period was ~450 tons/day, therefore 31.25 tons/hr is a highly conservative estimate for hourly emissions.

Currently Polyco 3960 is for both Air Knife and Rod Coating. The Ligos product is proposed to be used for Rod coating in the future.

WestRock

Battle Creek, Michigan

Permit No.: MI-ROP-B4072-2019a

Felt Wash Emissions

Felt Wash Information	
Presstige FB8180 / Presstige FB9050	
Maximum Applied	20,000 lb/month
Hours of Operation	8736 hr/yr
Components	
Max VOC %	0.12%

NOTE: WestRock utilizes two felt washes, Presstige FB9050 (non-VOC) and Presstige FB8180 (0.12% VOC)

Felt Wash Emissions		
Pollutant	(tpy)	(lb/hr)
VOC	0.14	0.03



RENEWABLE OPERATING PERMIT RENEWAL APPLICATION FORM

This information is required by Article II, Chapter 1, Part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Refer to instructions for additional information to complete the Renewable Operating Permit Renewal Application Form.

GENERAL INSTRUCTIONS

This application form should be submitted as part of an administratively complete application package for renewal of a Renewable Operating Permit (ROP). This application form consists of nine parts. Parts A – H must be completed for all applications and must also be completed for each section of a sectioned ROP. Answer all questions in all parts of the form unless directed otherwise. Detailed instructions for this application form can be found at <http://michigan.gov/air> (select the Permits Tab, “Renewable Operating Permits (ROP)/Title V”, then “ROP Forms & Templates”).

PART A: GENERAL INFORMATION

Enter information about the source, owner, contact person and the responsible official.

SOURCE INFORMATION

SRN B4072	SIC Code 2613	NAICS Code 322130	Existing ROP Number MI-ROP-B4072-2019	Section Number (if applicable)
Source Name WestRock California, LLC				
Street Address 177 Angell Street				
City Battle Creek	State MI	ZIP Code 49037	County Calhoun	
Section/Town/Range (if address not available)				
Source Description 100% Recycled paperboard mill				
<input type="checkbox"/> Check here if any of the above information is different than what appears in the existing ROP. Identify any changes on the marked-up copy of your existing ROP.				

OWNER INFORMATION

Owner Name WestRock	Section Number (if applicable)			
Mailing address (<input type="checkbox"/> check if same as source address) 1000 Abernathy Road, NE				
City Atlanta	State GA	ZIP Code 30328	County Fulton	Country USA

Check here if any information in this ROP renewal application is confidential. Confidential information should be identified on an Additional Information (AI-001) Form.

PART A: GENERAL INFORMATION (continued)

At least one contact and responsible official must be identified. Additional contacts and responsible officials may be included if necessary.

CONTACT INFORMATION

Contact 1 Name Andrew Olfier		Title Technical Director		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number 765-760-4400		E-mail address andrew.olfier@westrock.com		

Contact 2 Name (optional) Anu Nathan		Title Senior Manager, Environmental Services		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address) 1000 Abernathy Road NE, Suite 125				
City Atlanta	State GA	ZIP Code 30328	County Fulton	Country USA
Phone number 678-491-2845		E-mail address anu.nathan@westrock.com		

RESPONSIBLE OFFICIAL INFORMATION

Responsible Official 1 Name Eric M. Diring		Title Mill Manager		
Company Name & Mailing address (<input checked="" type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number 269-969-7219		E-mail address eric.diring@westrock.com		

Responsible Official 2 Name (optional)		Title		
Company Name & Mailing address (<input type="checkbox"/> check if same as source address)				
City	State	ZIP Code	County	Country
Phone number		E-mail address		

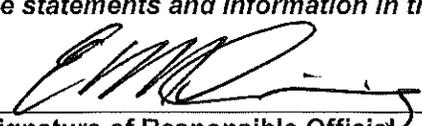
<input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part A. Enter AI-001 Form ID:

PART B: APPLICATION SUBMITTAL and CERTIFICATION by Responsible Official

Identify the items that are included as part of your administratively complete application in the checklist below. For your application to be complete, it must include information necessary to evaluate the source and to determine all applicable requirements. Answer the compliance statements as they pertain to all the applicable requirements to which the source is subject. The source's Responsible Official must sign and date this form.

Listing of ROP Application Contents. Check the box for the items included with your application.	
<input checked="" type="checkbox"/> Completed ROP Renewal Application Form (and any AI-001 Forms) (required)	<input type="checkbox"/> Compliance Plan/Schedule of Compliance
<input checked="" type="checkbox"/> Mark-up copy of existing ROP using official version from the AQD website (required)	<input type="checkbox"/> Stack Information
<input checked="" type="checkbox"/> Copies of all Permit(s) to Install (PTIs) that have not been incorporated into existing ROP (required)	<input type="checkbox"/> Acid Rain Permit Initial/Renewal Application
<input checked="" type="checkbox"/> Criteria Pollutant/Hazardous Air Pollutant (HAP) Potential to Emit Calculations	<input type="checkbox"/> Cross-State Air Pollution Rule (CSAPR) Information
<input type="checkbox"/> MAERS Forms (to report emissions not previously submitted)	<input type="checkbox"/> Confidential Information
<input type="checkbox"/> Copies of all Consent Order/Consent Judgments that have not been incorporated into existing ROP	<input checked="" type="checkbox"/> Paper copy of all documentation provided (required)
<input type="checkbox"/> Compliance Assurance Monitoring (CAM) Plan	<input type="checkbox"/> Electronic documents provided (optional)
<input type="checkbox"/> Other Plans (e.g., Malfunction Abatement, Fugitive Dust, Operation and Maintenance, etc.)	<input type="checkbox"/> Other, explain:

Compliance Statement	
This source is in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
This source will continue to be in compliance with all of its applicable requirements, including those contained in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and other applicable requirements not currently contained in the existing ROP.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
This source will meet in a timely manner applicable requirements that become effective during the permit term.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
The method(s) used to determine compliance for each applicable requirement is/are the method(s) specified in the existing ROP, Permits to Install that have not yet been incorporated into that ROP, and all other applicable requirements not currently contained in the existing ROP.	
If any of the above are checked No, identify the emission unit(s) or flexible group(s) affected and the specific condition number(s) or applicable requirement for which the source is or will be out of compliance at the time of issuance of the ROP renewal on an AI-001 Form. Provide a compliance plan and schedule of compliance on an AI-001 Form.	

Name and Title of the Responsible Official (Print or Type)	
Eric M. Diring, Mill Manager	
<i>As a Responsible Official, I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this application are true, accurate, and complete.</i>	
	10/6/2023
Signature of Responsible Official	Date

PART C: SOURCE REQUIREMENT INFORMATION

Answer the questions below for specific requirements or programs to which the source may be subject.

C1.	Actual emissions and associated data from all emission units with applicable requirements (including those identified in the existing ROP, Permits to Install and other equipment that have not yet been incorporated into the ROP) are required to be reported in MAERS. Are there any emissions and associated data that have not been reported in MAERS for the most recent emissions reporting year? If Yes , identify the emission unit(s) that was/were not reported in MAERS on an AI-001 Form. Applicable MAERS form(s) for unreported emission units must be included with this application.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C2.	Is this source subject to the federal regulations on ozone-depleting substances? (40 CFR Part 82)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C3.	Is this source subject to the federal Chemical Accident Prevention Provisions? (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68) If Yes , a Risk Management Plan (RMP) and periodic updates must be submitted to the USEPA. Has an updated RMP been submitted to the USEPA?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C4.	Has this stationary source added or modified equipment since the last ROP renewal that changes the potential to emit (PTE) for criteria pollutant (CO, NOx, PM10, PM2.5, SO2, VOC, lead) emissions? If Yes , include potential emission calculations (or the PTI and/or ROP revision application numbers, or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. If No , criteria pollutant potential emission calculations do not need to be included.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C5.	Has this stationary source added or modified equipment since the last ROP renewal that changes the PTE for hazardous air pollutants (HAPs) regulated by Section 112 of the federal Clean Air Act? If Yes , include potential emission calculations (or the PTI and/or ROP revision application numbers or other references for the PTE demonstration) for the added or modified equipment on an AI-001 Form. Fugitive emissions must be included in HAP emission calculations. If No , HAP potential emission calculations do not need to be included.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C6.	Are any emission units subject to the Cross-State Air Pollution Rule (CSAPR)? If Yes , identify the specific emission unit(s) subject to CSAPR on an AI-001 Form.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C7.	Are any emission units subject to the federal Acid Rain Program? If Yes , identify the specific emission unit(s) subject to the federal Acid Rain Program on an AI-001 Form. Is an Acid Rain Permit Renewal Application included with this application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C8.	Are any emission units identified in the existing ROP subject to compliance assurance monitoring (CAM)? If Yes , identify the specific emission unit(s) subject to CAM on an AI-001 Form. If a CAM plan has not been previously submitted to EGLE, one must be included with the ROP renewal application on an AI-001 Form. If the CAM Plan has been updated, include an updated copy. Is a CAM plan included with this application? If a CAM Plan is included, check the type of proposed monitoring included in the Plan: 1. Monitoring proposed by the source based on performance of the control device, or 2. Presumptively Acceptable Monitoring, if eligible	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/>
C9.	Does the source have any plans such as a malfunction abatement plan, fugitive dust plan, operation/maintenance plan, or any other monitoring plan that is referenced in an existing ROP, Permit to Install requirement, or any other applicable requirement? If Yes , then a copy must be submitted as part of the ROP renewal application.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
C10.	Are there any specific requirements that the source proposes to be identified in the ROP as non-applicable? If Yes , then a description of the requirement and justification must be submitted as part of the ROP renewal application on an AI-001 Form.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/>	Check here if an AI-001 Form is attached to provide more information for Part C. Enter AI-001 Form ID: AI-	

PART E: EXISTING ROP INFORMATION

Review all emission units and applicable requirements (including any source wide requirements) in the existing ROP and answer the questions below as they pertain to all emission units and all applicable requirements in the existing ROP.

<p>E1. Does the source propose to make any additions, changes or deletions to terms, conditions and underlying applicable requirements as they appear in the existing ROP? If <u>Yes</u>, identify changes and additions on Part F, Part G and/or Part H.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E2. For each emission unit(s) identified in the existing ROP, <u>all</u> stacks with applicable requirements are to be reported in MAERS. Are there any stacks with applicable requirements for emission unit(s) identified in the existing ROP that were <u>not</u> reported in the most recent MAERS reporting year? If <u>Yes</u>, identify the stack(s) that was/were not reported on applicable MAERS form(s).</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>
<p>E3. Have any emission units identified in the existing ROP been modified or reconstructed that required a PTI? If <u>Yes</u>, complete Part F with the appropriate information.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>E4. Have any emission units identified in the existing ROP been dismantled? If <u>Yes</u>, identify the emission unit(s) and the dismantle date in the comment area below or on an AI-001 Form.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>Comments: Boiler #3 needs to be to MAERS reporting</p>	
<p><input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part E. Enter AI-001 Form ID: AI-</p>	

PART F: PERMIT TO INSTALL (PTI) INFORMATION

Review all emission units and applicable requirements at the source and answer the following questions as they pertain to **all** emission units with PTIs. Any PTI(s) identified below must be attached to the application.

<p>F1. Has the source obtained any PTIs where the applicable requirements from the PTI have not been incorporated into the existing ROP? If <u>Yes</u>, complete the following table. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If <u>No</u>, go to Part G.</p>			
Permit to Install Number	Emission Units/Flexible Group ID(s)	Description (Include Process Equipment, Control Devices and Monitoring Devices)	Date Emission Unit was Installed/ Modified/ Reconstructed
120-22	EU-BOILER-0003	Natural gas-fired boiler rated at 75 MMBTU/HR	8/24/2023
<p>F2. Do any of the PTIs listed above change, add, or delete terms/conditions to established emission units in the existing ROP? If <u>Yes</u>, identify the emission unit(s) or flexible group(s) affected in the comments area below or on an AI-001 Form and identify all changes, additions, and deletions in a mark-up of the existing ROP. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>			
<p>F3. Do any of the PTIs listed above identify new emission units that need to be incorporated into the ROP? If <u>Yes</u>, submit the PTIs as part of the ROP renewal application on an AI-001 Form, and include the new emission unit(s) or flexible group(s) in the mark-up of the existing ROP. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>F4. Are there any stacks with applicable requirements for emission unit(s) identified in the PTIs listed above that were <u>not</u> reported in MAERS for the most recent emissions reporting year? If <u>Yes</u>, identify the stack(s) that were not reported on the applicable MAERS form(s). <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>F5. Are there any proposed administrative changes to any of the emission unit names, descriptions or control devices in the PTIs listed above for any emission units not already incorporated into the ROP? If <u>Yes</u>, describe the changes on an AI-001 Form. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>			
<p>Comments: Addition of 3rd natural gas-fired boiler (EU-BOILER-0003) to the FG-Boiler group.</p>			
<p><input type="checkbox"/> Check here if an AI-001 Form is attached to provide more information for Part F. Enter AI-001 Form ID: AI-</p>			

PART G: EMISSION UNITS MEETING THE CRITERIA OF RULES 281(2)(h), 285(2)(r)(iv), 287(2)(c), OR 290

Review all emission units and applicable requirements at the source and answer the following questions.

G1. Does the source have any new and/or existing emission units which do not already appear in the existing ROP and which meet the criteria of Rules 281(2)(h), 285(2)(r)(iv), 287(2)(c), or 290.
 If Yes, identify the emission units in the table below. If No, go to Part H. Yes No
Note: If several emission units were installed under the same rule above, provide a description of each and an installation/modification/reconstruction date for each.

Origin of Applicable Requirements	Emission Unit Description – <i>Provide Emission Unit ID and a description of Process Equipment, Control Devices and Monitoring Devices</i>	Date Emission Unit was Installed/ Modified/ Reconstructed
<input type="checkbox"/> Rule 281(2)(h) or 285(2)(r)(iv) cleaning operation		
<input type="checkbox"/> Rule 287(2)(c) surface coating line		
<input type="checkbox"/> Rule 290 process with limited emissions		

Comments:

Check here if an AI-001 Form is attached to provide more information for Part G. Enter AI-001 Form ID: **AI-**

PART H: REQUIREMENTS FOR ADDITION OR CHANGE

Complete this part of the application form for all proposed additions, changes or deletions to the existing ROP. This includes state or federal regulations that the source is subject to and that must be incorporated into the ROP or other proposed changes to the existing ROP. **Do not include additions or changes that have already been identified in Parts F or G of this application form.** If additional space is needed copy and complete an additional Part H.

Complete a separate Part H for each emission unit with proposed additions and/or changes.

H1. Are there changes that need to be incorporated into the ROP that have not been identified in Parts F and G? If <u>Yes</u> , answer the questions below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H2. Are there any proposed administrative changes to any of the existing emission unit names, descriptions or control devices in the ROP? If <u>Yes</u> , describe the changes in questions H8 – H16 below and in the affected Emission Unit Table(s) in the mark-up of the ROP.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
H3. Does the source propose to add a new emission unit or flexible group to the ROP not previously identified in Parts F or G? If <u>Yes</u> , identify and describe the emission unit name, process description, control device(s), monitoring device(s) and applicable requirements in questions H8 – H16 below and in a new Emission Unit Table in the mark-up of the ROP. See instructions on how to incorporate a new emission unit/flexible group into the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H4. Does the source propose to add new state or federal regulations to the existing ROP? If <u>Yes</u> , on an AI-001 Form, identify each emission unit/flexible group that the new regulation applies to and identify <u>each</u> state or federal regulation that should be added. Also, describe the new requirements in questions H8 – H16 below and add the specific requirements to existing emission units/flexible groups in the mark-up of the ROP, create a new Emission Unit/Flexible Group Table, or add an AQD template table for the specific state or federal requirement.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H5. Has a Consent Order/Consent Judgment (CO/CJ) been issued where the requirements were not incorporated into the existing ROP? If <u>Yes</u> , list the CO/CJ number(s) below and add or change the conditions and underlying applicable requirements in the appropriate Emission Unit/Flexible Group Tables in the mark-up of the ROP.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H6. Does the source propose to add, change and/or delete source-wide requirements? If <u>Yes</u> , identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
H7. Are you proposing to streamline any requirements? If <u>Yes</u> , identify the streamlined and subsumed requirements and the EU ID, and provide a justification for streamlining the applicable requirement below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

H8. Does the source propose to add, change and/or delete **emission limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H9. Does the source propose to add, change and/or delete **material limit** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H10. Does the source propose to add, change and/or delete **process/operational restriction** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H11. Does the source propose to add, change and/or delete **design/equipment parameter** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H12. Does the source propose to add, change and/or delete **testing/sampling** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H13. Does the source propose to add, change and/or delete **monitoring/recordkeeping** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H14. Does the source propose to add, change and/or delete **reporting** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

PART H: REQUIREMENTS FOR ADDITION OR CHANGE – (continued)

H15. Does the source propose to add, change and/or delete **stack/vent restrictions**? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H16. Does the source propose to add, change and/or delete any **other** requirements? If Yes, identify the addition/change/deletion in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

H17. Does the source propose to add terms and conditions for an alternative operating scenario or intra-facility trading of emissions? If Yes, identify the proposed conditions in a mark-up of the corresponding section of the ROP and provide a justification below. Yes No

Check here if an AI-001 Form is attached to provide more information for Part H. Enter AI-001 Form ID: **AI-**



RENEWABLE OPERATING PERMIT APPLICATION AI-001: ADDITIONAL INFORMATION

This information is required by Article II, Chapter 1, part 55 (Air Pollution Control) of P.A. 451 of 1994, as amended, and the Federal Clean Air Act of 1990. Failure to obtain a permit required by Part 55 may result in penalties and/or imprisonment. Please type or print clearly. Refer to instructions for additional information to complete this form.

SRN: B4072

Section Number (if applicable):

1. Additional Information ID
AI-001

Additional Information

2. Is This Information Confidential?

Yes No

Addition of Boiler #3 (PTI included)

Update Boiler #1 & Boiler #2 maximum heat input capacity to 88.55 MMTU/hr



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



LIESL EICHLER CLARK
DIRECTOR

August 30, 2022

Eric Diring, Mill Manager
WestRock California LLC
177 Angell Street
Battle Creek, Michigan 49037

Dear Eric Diring:

This letter is in reference to your General Permit to Install application for propane or natural gas-fired boiler(s) located at 177 Angell Street, Battle Creek, Michigan. This application has been determined to be complete by the Air Quality Division (AQD). As a result, installation and operation of the propane or natural gas-fired boiler(s) is approved subject to the terms and conditions of this General Permit, identified as No. 120-22.

This approval is based upon your certification that the equipment to be installed meets the necessary criteria for applicability and that you will comply with the terms and conditions of this General Permit to Install. The terms and conditions, which are necessary to assure that the process will operate in compliance with all applicable requirements for air pollution control, are stipulated in the enclosed supplement. *Please review these conditions thoroughly so that you may take the actions necessary to ensure compliance with all of these conditions.*

The equipment covered by this permit is also subject to the requirements of the Renewable Operating Permit Program. Submittal of the M-001 and C-001 forms may be required prior to commencing operation. Additional information is included in the M-001 form instructions. The forms and instructions are available on the Internet, or they can be obtained by contacting the Kalamazoo District Office at 269-567-3500. The AQD permit web page is located at <https://www.michigan.gov/air>, click the "Permits" tab, and click the link at the first bullet entitled "Air Quality Division Permits."

A change that is subject to Rule 215 subrules (1), (2), or (3) of Act 451 requires the submittal of the forms to the appropriate AQD District Office. If a change is made pursuant to Rule 216, please submit the required forms to the Cadillac District Office at the address provided in the M-001 form instructions. Also, you must notify the Kalamazoo District Office, in writing, within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of the process or process equipment covered by this General Permit to Install.

Please note, a General Permit to Install may be revised or updated for various reasons, including making minor administrative changes, clarifying instructions or permit language, or correcting an underlying applicable requirement. The most recent version

of the general permit is available on the Internet and all revisions are summarized in the General Permit to Install background document. If an owner/operator has applied for and been granted coverage under a General Permit to Install, compliance with the most recent published version is required. The AQD permit web page is located at <https://www.michigan.gov/air>.

Please contact the AQD District Office or me if you have any questions regarding this permit.

Sincerely,



Sue Thelen
Permit Section, Air Quality Division
517-899-6252
ThelenS4@michigan.gov

Enclosures
cc/enc: Rex Lane, EGLE

**ATTACHMENT A
GENERAL CONDITIONS**

1. The process or process equipment covered by this general permit to install shall not be reconstructed, relocated, or modified unless a Permit to Install pursuant to Rule 201 authorizing such action is issued by the Department, or an application for coverage under a General Permit to Install pursuant to Rule 201a, is submitted to and approved by the Department. For the purpose of a general permit to install, the permittee is defined as any person who owns or operates a process or process equipment at the source for which coverage under the general permit has been granted.
2. Operation of any process or process equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
3. Operation of this equipment shall not interfere with the attainment or maintenance of the air quality standard for any air contaminant. **(R 336.1207(1)(b))**
4. 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 Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department 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).
5. Coverage under this general permit to install does not exempt the permittee from complying with any future regulation, which may be promulgated under Part 55 of 1994 PA 451.
6. Coverage under this general permit to install does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
7. The permittee shall notify any public utility of any excavation, tunneling and discharging of explosives or demolition of buildings which may affect said utility's facilities in accordance with Act 53 of the Public Acts of 1974, being sections 460.701 to 460.718 of the Michigan Compiled laws and comply with each of the requirements of that Act.
8. The restrictions and conditions of this general permit to install shall apply to any person or legal entity which now or shall hereafter own or operate the equipment for which coverage under this general permit to install is issued. A written request to the Department for a change in ownership or operational control of the process or process equipment shall be made pursuant to Rule 219.
9. If the installation of the equipment for which coverage under this general permit to install has been issued, has not commenced within, or has been interrupted for, 18 months, then the general permit to install shall become void unless otherwise authorized by the Department as a condition of the permit. Furthermore, the permittee shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation or construction of the equipment allowed by this general permit to install. **(R 336.1201(4))**

10. Except as provided in subrules (2) and (3) or unless the special conditions of the general permit to install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301(1))**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this general permit to install.
11. 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 R 336.1370(2). **(R 336.1370)**
12. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**
13. Any required testing protocol shall conform to a format acceptable to the AQD. **(R 336.2003(1))**
14. Any required test results, which must be submitted to the AQD, shall conform to a format acceptable to the AQD. **(R 336.2001(4))**
15. 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)**
16. For a stationary source that becomes a major source, as defined by R 336.1211(1)(a), upon receipt of approval for coverage under this general permit to install, an administratively complete application for a renewable operating permit shall be submitted not more than 12 months after the stationary source commences operation as a major source. Commencing operation as a major source occurs upon commencement of trial operation of the new or modified process or process equipment that increased the potential to emit of the stationary source to more than or equal to the applicable major source definition specified in R 336.1211(1)(a).
17. For a stationary source that is already a major source with an existing renewable operating permit, the source shall notify the Department of the installation of the process or process equipment covered by this general permit, pursuant to R 336.1215(3) or apply for a modification pursuant to R 336.1216(2) prior to commencing operation. The notification or application to modify the renewable operating permit shall be made using a form approved by the Department.

**ATTACHMENT A
SPECIAL CONDITIONS**

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Description / Emission Unit(s) Included in Group
FG-BOILERS	One or more propane or natural gas-fired boilers, each with a maximum rated heat input of 100 million Btu per hour, and each controlled by a low-NOx burner.
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.	

The following conditions apply to FG-BOILERS

I. EMISSION LIMITS

Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Applicable Requirement
1. NOx	0.05 lb/MMBtu	Test Method	FG-BOILERS	SC V.1, SC VI.3	R 336.1205(1)(a)

lb/MMBtu = pound per million Btu

II. MATERIAL LIMITS

1. The permittee shall burn only propane or natural gas in FG-BOILERS. **(R 336.1205(1)(a))**
2. The fuel use for FG-BOILERS covered by this general permit shall not exceed 1400 million standard cubic feet per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1224, R 336.1225, R 336.1205(1)(a))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall operate FG-BOILERS in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction. **(R 336.1912)**

IV. DESIGN/EQUIPMENT PARAMETERS Not Applicable (N/A)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Verification of the NOx emission limit (0.05 pound of NOx emitted per million Btu of heat input), by testing at owner's expense, in accordance with Department requirements may be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of the emission factor includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the fuel use for FG-BOILERS on a daily basis. **(R 336.1205(1)(a))**
2. The permittee shall keep, in a satisfactory manner, daily, monthly and 12-month rolling time period fuel use records for FG-BOILERS. The records must indicate the total amount of fuel used in FG-BOILERS. All records shall be kept on file and made available to the Department upon request. **(R 336.1205(1)(a), 40 CFR 60.48c(g))**
3. The permittee shall keep on file, a demonstration that the low-NOx burner is designed to emit no more than 0.05 pound of NOx per million Btu of heat input. (i.e., manufacturer's guarantee, test data, etc.) **(R 336.1205(1)(a))**
4. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, any maintenance performed and any testing results for FG-BOILERS. All records shall be kept on file and made available to the Department upon request. **(R 336.1702(a), R 336.1910)**

VII. REPORTING

1. The permittee shall submit the following notifications to the AQD District Supervisor in accordance with 40 CFR 60.48c: **(40 CFR Part 60 Subparts A & Dc)**
 - a) A notification of the date when construction was commenced, submitted no later than 30 calendar days after such date.
 - b) A notification of the actual date of startup of the source, submitted within 30 calendar days after such date.

VIII. STACK/VENT RESTRICTIONS

1. The exhaust gases from FG-BOILERS shall be discharged unobstructed vertically upwards to the ambient air from stack(s) with an exit point not less than one and one half times the building height (from ground level to point of discharge). **(R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

IX. OTHER REQUIREMENTS

1. The permittee shall not replace or modify any portion of FG-BOILERS, including control equipment, nor install additional boilers to FG-BOILERS, unless all of the following conditions are met: **(R 336.1201)**
 - a) The permittee shall update the general permit by submitting a new Process Information Form (EQP5783) to the Permit Section and District Supervisor, identifying the existing and new equipment a minimum of 10 days before the replacement, modification, or installation of new equipment.
 - b) The permittee shall continue to meet all general permit to install applicability criteria after the replacement, modification or installation of new equipment is complete.
 - c) The permittee shall keep records of the date and description of the replacement, modification, or installation of new equipment at the source. All records shall be kept on file for a period of at least five years and made available to the Department upon request.