

State Registration  
Number  
B4072

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-B4072-2019

**WestRock California, LLC**

State Registration Number (SRN): B4072

Located at

177 Angell Street, Battle Creek, Calhoun County, Michigan 49015-1598

Permit Number: MI-ROP-B4072-2019

Staff Report Date: February 4, 2019

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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Michigan Department of Environmental Quality  
Air Quality Division

State Registration Number

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**Purpose**

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan's Administrative Rules for Air Pollution Control promulgated under Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

**General Information**

Stationary Source Mailing Address:	WestRock California, LLC 177 Angell Street Battle Creek, Michigan 49015-1598
Source Registration Number (SRN):	B4072
North American Industry Classification System (NAICS) Code:	322130
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201800096
Responsible Official:	Tom Shannon, Mill Manager 269-969-7122
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-567-3542
Date Application Received:	August 2, 2018
Date Application Was Administratively Complete:	August 2, 2018
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	February 4, 2019
Deadline for Public Comment:	March 6, 2019

## Source Description

WestRock California, LLC (Facility) manufactures boxboard from recycled paper. Major equipment includes one boxboard machine with associated coating application and steam dryer sections, a rewinding machine, and two natural gas or fuel oil fired boilers. The Facility is located in an industrial area approximately one mile west of downtown Battle Creek. There are some private residences located within 250 feet of the north and south Facility property boundary.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System for the year 2017.

### TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	42.1
Lead (Pb)	0.00
Nitrogen Oxides (NO <sub>x</sub> )	93.6
Particulate Matter (PM)	3.6
Sulfur Dioxide (SO <sub>2</sub> )	0.3
Volatile Organic Compounds (VOC)	29.0

The following table lists HAP emissions as calculated for the year 2017 by the Facility:

Individual Hazardous Air Pollutants (HAP) **	Tons per Year
Acetaldehyde	2.34
Acrylic Acid	0.86
Biphenyl	1.39
Hexane	0.90
Methanol	1.90
Vinyl Acetate	1.55
<b>Total HAPs</b>	<b>10.94</b>

\*\*As listed pursuant to Section 112(b) of the federal Clean Air Act.

See Parts C and D in the ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

## Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is in Calhoun County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of SO<sub>2</sub>, NO<sub>x</sub>, CO, and PM exceeds 100 tons per year.

The stationary source is a "synthetic minor" source regarding HAP emissions because the stationary source accepted a legally enforceable permit condition limiting the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, to less than 10 tons per year and the potential to emit of all HAPs combined to less than 25 tons per year. The stationary source is not subject to the National Emissions Standards for Hazardous Air Pollutants for printing, coating and dyeing of fabric and

other textiles promulgated in 40 CFR Part 63, Subparts A and OOOO which applies only to facilities that are a major source of HAPs.

No emission units at the stationary source are currently subject to the Prevention of Significant Deterioration (PSD) regulations of The Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality or 40 CFR 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations. Modifications of the process equipment at this stationary source may be subject to the PSD requirements.

EU-BLR-0001 and EU-BLR-0002 (FG-BOILERS) at the stationary source were modified in 1972 from coal fired to natural gas, with fuel oil back up capability. The stationary source boilers are not currently subject to the New Source Performance Standards for industrial boilers (40 CFR Part 60, Subpart Dc) because they were installed prior to promulgation and have not been modified or reconstructed since the effective date of June 9, 1987. Additionally, the boilers are not subject to 40 CFR Part 60, Subparts D, Da, or Db, because they were installed prior to rule promulgation. On August 21, 2006, the Facility was issued Permit to Install (PTI) No. 113-06 to use up to 16,000 tons/year of yellow grease in FG-BOILERS. The boilers were not physically modified because the existing # 6 fuel oil firing equipment is capable of processing the yellow grease fuel. To date, the stationary source has not fired yellow grease in FG-BOILERS.

FG-BOILERS at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers promulgated in 40 CFR Part 63, Subparts A and JJJJJJ (Boiler Area Source MACT). The ROP contains special conditions provided by the Facility in their application for applicable requirements from 40 CFR Part 63, Subparts A and JJJJJJ. The AQD is not delegated the regulatory authority for this area source MACT.

EU-FIRE-PUMP-ENGINE at the stationary source is subject to the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII, based on its manufacture date.

EU-COATING, EU-STOCKPREP, EU-PAPER MACHINE and FG-PAPERMAKING underwent Best Available Control Technology (BACT) review during the permitting process for PTI No. 16-13. EU-COATING requires the application of water-based coating with low VOC content using roller applicators, which satisfies the Rule 702(a) BACT requirement for VOCs. As part of the BACT analysis, the cost for control on these lines was reviewed and determined to be uneconomical. The maximum hourly toxic air contaminant (TAC) emissions were calculated for FG-PAPERMAKING based on National Council for Air and Stream Improvement emission factors. All TACs were modeled and the predicted ambient impacts were below their respective health screening levels.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

No emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

Please refer to Parts B, C, and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

**Source-Wide Permit to Install (PTI)**

Rule 214a requires the issuance of a Source-Wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. The PTIs issued after the effective date of ROP No. MI-ROP-B4072-2014 are identified in Appendix 6 of the ROP.

PTI Number			
310-00	113-06	4-07	4-07A
16-13			

**Streamlined/Subsumed Requirements**

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

**Non-applicable Requirements**

Part E of the ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the ROP Application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the ROP pursuant to Rule 213(6)(a)(ii).

**Processes in Application Not Identified in Draft ROP**

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EU-COAT-DRY-001	Natural gas fired coating dryers - total capacity of 18 MMBtu/hr. Four ovens at 2.7 MMBtu/hr each; one row of four IR dryers at 2.4 MMBtu/hr; three IR dryers at 1.6 MMBtu/hr each.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0002	Front Office Carrier (NG) space heaters (3); 0.080 MMBtu/hr each.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0003	Receiving dock space heater; 0.250 MMBtu/hr.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0004	Electrical shop space heater; 0.075 MMBtu/hr.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0005	Pipe shop two (2) hot water heaters; 0.199 MMBtu/hr.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0006	MW locker room; hot water heater; 0.199 MMBtu/hr.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0007	Space heater at river pump house located one mile north of property, 0.075 MMBtu/hr.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0008	Beater room 7.425 MMBTU/hr air make-up unit (Unit 1).	R 336.1212(4)(c)	R 336.1282(2)(b)(i)

<b>PTI Exempt Emission Unit ID</b>	<b>Description of PTI Exempt Emission Unit</b>	<b>Rule 212(4) Citation</b>	<b>PTI Exemption Rule Citation</b>
EUSPH0009	Beater room 7.425 MMBTU/hr air make-up unit (Unit 2).	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0010	Beater room 7.425 MMBTU/hr air make-up unit (Unit 1).	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0011	Sheeter roof air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0012	Machine room basement air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0013	Machine room basement air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0014	Machine room basement air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0015	Machine room air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0016	Machine room air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
EUSPH0017	Machine room air make-up unit.	R 336.1212(4)(c)	R 336.1282(2)(b)(i)

**Draft ROP Terms/Conditions Not Agreed to by Applicant**

This draft ROP does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

**Action Taken by the DEQ, AQD**

The AQD proposes to approve this ROP. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft ROP and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Rex Lane, Kalamazoo District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP Application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

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**MARCH 12, 2019 - STAFF REPORT ADDENDUM**

**Purpose**

A Staff Report dated February 4, 2019, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

**General Information**

Responsible Official:	Tom Shannon, Mill Manager 269-969-7122
AQD Contact:	Matt Deskins, Environmental Quality Analyst 269-567-3542

**Summary of Pertinent Comments**

The United States Environmental Protection Agency (EPA) has reviewed the draft Renewable Operating Permit (ROP) renewal for WestRock California, LLC (State Registration Number B4072), located in Battle Creek, Michigan. To ensure that the source meets Federal Clean Air Act requirements, that the permit will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

EPA Comment 1: EU-FIRE-PUMP-ENGINE. Please verify whether this unit is subject to the Maximum Available Control Technology (MACT) for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63 Subparts A and ZZZZ), and include any applicable requirements and regulatory citations as appropriate, in accordance with 40 CFR 70.6(a)(1). Please note that 40 CFR 63.6590(c) provides that any affected MACT Subpart ZZZZ source meeting the criteria in 40 CFR 63.6590(c) is subject to 40 CFR Part 60, Subpart IIII for compression ignition engines (or 40 CFR Part 60, Subpart JJJJ, for spark ignition engines). Subpart IIII requirements are currently included in EU-FIRE-PUMP-ENGINE.

AQD Response: Under Section IX. "Other Requirements" of EU-FIRE-PUMP-ENGINE, a statement was added indicating that the emission unit was also subject to 40 CFR Part 63, Subpart ZZZZ. However; subsection 63.6590(c) provides that any affected Subpart ZZZZ source meeting the criteria in subsection 63.6590(c) is subject to 40 CFR Part 60, Subpart IIII which is the New Source Performance Standards (NSPSP for Compression Ignition Engines. Therefore, compliance with Subpart ZZZZ is accomplished by complying with the applicable requirements of Subpart IIII.

EPA Comment 2: FG-BOILERS. Section IX includes a table with requirements from the Industrial, Commercial, and Institutional Boilers Area Sources MACT (40 CFR Part 63, Subparts A and JJJJJJ). To ensure that the permit includes all currently applicable Subpart JJJJJJ requirements, in accordance with 40 CFR 70.6(a)(1), please consider updating FG-BOILERS to be consistent with MDEQ's MACT permit content templates.

AQD Response: An updated AQD Boiler MACT Template was used to replace the existing one contained in the Draft ROP for FG-BOILERS. Any conditions that were established pursuant to the New Source Review PTI that had been issued were incorporated where applicable and certain conditions were also deleted if they had already been completed and/or were non-applicable to the source.

**Changes to the February 4, 2019 Draft ROP**

A statement was added to EU-FIRE-PUMP-ENGINE indicating that the emission unit was also subject to 40 CFR Part 63, Subpart ZZZZ and an updated AQD Boiler MACT Template was used to replace the existing one contained in the Draft ROP for FG-BOILERS.