

State Registration Number
N0802

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N0802-2020

Albar Industries, Incorporated

State Registration Number (SRN): N0802

Located at

780 Whitney Drive, Lapeer, Lapeer County, Michigan 48446

Permit Number: MI-ROP-N0802-2020

Staff Report Date: September 14, 2020

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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RENEWABLE OPERATING PERMIT
SEPTEMBER 14, 2020 - STAFF REPORT

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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:	Albar Industries, Incorporated 780 Whitney Drive Lapeer, Michigan 48446
Source Registration Number (SRN):	N0802
North American Industry Classification System (NAICS) Code:	326199
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900185
Responsible Official:	Christopher May, Director of Operations 810-667-0150 Glenn Curtis, President 810-667-0150
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-275-0439
Date Application Received:	November 22, 2019
Date Application Was Administratively Complete:	January 7, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	September 14, 2020
Deadline for Public Comment:	October 14, 2020

Source Description

Albar Industries Incorporated is a Class A liquid finisher, providing prime coat, base coat, clear coat and Hydrographic finishing services for interior and exterior use. They provide finishes for plastic and metal components used in both military and automotive manufacturing. Coating are applied in emission units EU-LN-1 through EU-LN-5. EU-LN1, EU-LN2 and EU-LN3 are coating lines with chain on edge conveyor systems. EU-LN4 is a smaller side line booth with a curing oven. EU-LN5 is a booth with a natural gas fired heater. All spray booths utilized dry filters for particulate overspray control. EU-LN3 has a VOC concentrator and a thermal oxidizer to control VOC emissions from the basecoat booth. EU-Coldcleaners are used to wash paint line masking equipment. EU-Boiler 1 & 2 are used to produce heated water for the parts washers on EU-LN1, EU-LN2 and EU-LN3. EU-Solventdistunit1 is used to recycle acetone for the purge solvent cleaning of spray equipment. EU-Burnoff Oven is used to clean paint overspray buildup off of parts hangars and racks used in the coating lines and booths.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2019**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)*	2.3
Lead (Pb)	0
Nitrogen Oxides (NO _x)	2.9
Particulate Matter (PM)*	0.2
Sulfur Dioxide (SO ₂)	0.01
Volatile Organic Compounds (VOCs)	35.3
*estimated based on natural emission factors	

The Hazardous Air Pollutant emissions for this facility are not required to be calculated on an annual basis.

Individual Hazardous Air Pollutants (HAPs)**	Tons per Year
Total Hazardous Air Pollutants (HAPs)	Not Calculated

**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 subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of Volatile Organic Compounds exceeds 100 tons per year. Also, the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

EU-LN1, EU-LN2, EU-LN3, and EU-LN2&3 at the stationary source were subject to review under the Prevention of Significant Deterioration regulations of 40 CFR 52.21, because at the time of New Source Review permitting the potential to emit of Volatile Organic Compounds was greater than 250 tons per year.

EU-LN1, EU-LN2, EU-LN3, EU-LN4,EU-LN2&3 and EU-LN5 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for the surface coating of miscellaneous metal parts promulgated in 40 CFR Part 63, Subparts A and MMMM.

EU-LN1, EU-LN2, EU-LN3, EU-LN4, EU-LN2&3 and EU-LN5 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for the surface coating of plastic parts and products promulgated in 40 CFR Part 63, Subparts A and PPPP.

EU-Boiler 1 and EU-Boiler 2 at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for industrial, commercial, and institutional boilers and process heaters promulgated in 40 CFR Part 63, Subparts A and DDDDD.

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."

The following Emission Units/Flexible Groups are subject to CAM:

Emission Unit/ Flexible group ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/ Flexible Group for CAM	PAM? *
EU-LN3	VOC/ 1668 pounds per day	R 336.1205	Fluidized bed concentrator and Regenerative Thermal Oxidizer	Fluidized bed concentrator inlet desorption gas temperature shall be no more than 15°F below the most recent acceptable performance test. RTO combustion chamber temperature shall be operated at a minimum temperature of 1400°F.	NA	No
EU-LN3	VOC/ 137.7 Tons per 12-month rolling time period.	R 336.1205 R 336.1702(d)	Fluidized bed concentrator and Regenerative Thermal Oxidizer	Fluidized bed concentrator inlet desorption gas temperature shall be no more than 15 °F below the most recent acceptable performance test. RTO combustion chamber temperature shall be operated at a minimum temperature of 1400°F.	NA	No

Emission Unit/ Flexible group ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/ Flexible Group for CAM	PAM? *
EU-LN3	VOC and Acetone/ 157.7 Tons per 12-month rolling time period.	R 336.1205, R 336.1702(d)	Fluidized bed concentrator and Regenerative Thermal Oxidizer	Fluidized bed concentrator inlet desorption gas temperature shall be no more than 15°F below the most recent acceptable performance test. RTO temperature shall be operated at a minimum temperature of 1400°F.	NA	No
EU-LN2&3	VOC/ 137.7 Tons per 12-month rolling time period.	R 336.1205 R 336.1702(d)	Fluidized bed concentrator and Regenerative Thermal Oxidizer	Fluidized bed concentrator inlet desorption gas temperature shall be no more than 15°F below the most recent acceptable performance test. RTO combustion chamber temperature shall be operated at a minimum temperature of 1400°F	NA	No

*Presumptively Acceptable Monitoring (PAM)

The Fluidized bed concentrator desorption gas inlet temperature and average RTO combustion chamber temperature were both selected as indicators of performance for the fluidize bed concentrator and the RTO, respectively, because they are indicative of the VOC removal occurring in the Fluidized bed concentrator and the VOC destruction occurring within the RTO and both are widely accepted methods of monitoring for these devices. If the desorption gas inlet temperature decreases significantly, then proper VOC removal cannot take place, reducing removal efficiency. Therefore, the requirement to monitor this temperature and maintain proper records are is appropriate to assure VOC removal efficiency. If the combustion chamber temperature decreases significantly, then complete combustion of the VOCs may not occur, reducing the destruction efficiency. Therefore, the requirement to monitor this temperature and maintain proper records are appropriate to assure VOC destruction efficiency. Temperature monitoring is specifically identified in the monitoring/recordkeeping requirements under the current ROP Emission Unit EU-LN3.

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. PTIs issued after the effective date of ROP No. MI-ROP-N0802-2015 are identified in Appendix 6 of the ROP.

PTI Number			
25-14	24-04 (formerly 344-89C, 405-87D and 405-78B)	1241-91	

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

There were no processes listed in the ROP Application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

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 EGLE, 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 Brad Myott, Lansing 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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NOVEMBER 2, 2020 - STAFF REPORT ADDENDUM

Purpose

A Staff Report dated September 14, 2020, 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:	Christopher May, Director of Operations 810-667-0150 Glenn Curtis, President 810-667-0150
AQD Contact:	Robert Byrnes, Senior Environmental Engineer 517-275-0439

Summary of Pertinent Comments

No pertinent comments were received during the 30-day public comment period.

Changes to the September 14, 2020 Draft ROP

No changes were made to the draft ROP.