### Michigan Department of Environment, Great Lakes and Energy Air Quality Division

State Registration Number B4197

# RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number

MI-ROP-B4197-2016c

#### **AAR MOBILITY SYSTEMS**

SRN: B4197

Located at:

201 Haynes Street, Cadillac, Wexford County, Michigan 49601

Permit Number: MI-ROP-B4197-2016c

Staff Report Date: September 5, 2016

Amended Dates: July 11, 2017

May 2, 2018 March 6, 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) 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).

## **TABLE OF CONTENTS**

SEPTEMBER 5, 2016 - STAFF REPORT	3
OCTOBER 6, 2016 - STAFF REPORT ADDENDUM	7
JULY 11, 2017 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION	8
MAY 2, 2018 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION	9
MARCH 6, 2019 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION	10

State Registration Number B4197

## RENEWABLE OPERATING PERMIT

**SEPTEMBER 5, 2016 - STAFF REPORT** 

ROP Number

MI-ROP-B4197-2016

#### <u>Purpose</u>

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 of 1990 and Michigan's Administrative Rules for Air Pollution Control pursuant to 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:	AAR Mobility Systems
	201 Haynes Street
	Cadillac, Michigan 49601
Source Registration Number (SRN):	B4197
North American Industry Classification System	332311
(NAICS) Code:	
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201500150
Responsible Official:	Mark Platko, General Manager
	231-779-4856
AQD Contact:	Bill Rogers, Environmental Quality Analyst
	989-705-3406
Date Application Received:	September 21, 2015
Date Application Was Administratively Complete:	September 21, 2015
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	September 5, 2016
Deadline for Public Comment:	October 5, 2016

## **Source Description**

AAR Mobility Systems is located within the City of Cadillac in Wexford County. AAR manufactures air cargo transportation equipment for the military, including containers, pallets, and aircraft floor panels.

The products are composed of various combinations of aluminum, balsa wood, and fiberglass. Manufacturing processes used include woodworking, metal preparation and machining, adhesive coating application, gluing, paint application, and assembly.

The facility also uses an air stripping tower. This device is used to remove volatile organic compounds from groundwater beneath the facility site.

In addition to manufacturing new products, AAR Mobility Systems also rebuilds old containers and pallets.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2015**.

#### TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	0
Lead (Pb)	0
Nitrogen Oxides (NO <sub>x</sub> )	0
Particulate Matter (PM)	0.4
Sulfur Dioxide (SO <sub>2</sub> )	0
Volatile Organic Compounds (VOCs)	9.8

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2015 by the AQD:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Methanol	0.02
Chromium compounds	0.04
Toluene	1.55
4,4,Diphenyl methane diisocyanate	0.10
Total Hazardous Air Pollutants (HAPs)	1.71

<sup>\*\*</sup>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 located in Wexford County, which is currently designated by the U.S. 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 Volatile Organic Compounds exceeds 100 tons per year; the potential to emit of Particulate Matter exceeds 100 tons per year; and the potential to emit of any single HAP regulated by the Federal Clean Air Act, Section 112, is more than 10 tons per year and/or the potential to emit of all HAPs combined is more than 25 tons per year.

EU197LINENOCTRL, EUCONTNRNOCTRL, EU197LINE, EUCONTAINERLINE, EUCLEANUP, EUBALSACORE, and EUSKINORRAIL at the stationary source are subject to National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, promulgated under 40 CFR Part 63, Subparts A and MMMM.

EU500HPBOILER at the stationary source is subject to National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, promulgated under 40 CFR Part 63, Subparts A and DDDDD.

A second boiler, EU400HPBOILER, is not included in the new draft ROP because it has been removed since the previous renewal of the stationary source's ROP.

No emissions units at the stationary source are currently subject to the Prevention of Significant Deterioration regulations of Part 18, Prevention of Significant Deterioration of Air Quality of Act 451, because at the time of New Source Review permitting the potential to emit of volatile organic compounds was less than 250 tons per year.

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 emission limitations or standards for Volatile Organic Compounds from EU197LINE, EUCONTAINERLINE, EUCLEANUP, EUBALSACORE, and EUSKINONRAIL at the stationary source are not exempt from federal Compliance Assurance Monitoring (CAM) regulation under 40 CFR Part 64, but presumptively acceptable monitoring conditions from 40 CFR Part 63, Subpart MMMM for Organic Hazardous Air Pollutants are included in this ROP. This means that monitoring procedures for Organic Hazardous Air Pollutants are presumed to be adequate to ensure compliance with Volatile Organic Compounds emission standards as well.

EUWOODROOM and EUBALSACORE at the stationary source are subject to the federal Compliance Assurance Monitoring rule under 40 CFR Part 64. These emission units have a control device and potential pre-control emissions of PM greater than the major source threshold level. The control device is a baghouse to remove particles from sawing and sanding wood and metal from the exhaust stream. The monitoring for the control device is:

- 1. Record differential air pressure across the baghouse each day the equipment operates.
- 2. Observe the outside of the baghouse each week for any visible emissions.

Baghouses usually run at relatively constant differential pressure; an unexplained increase may be due to blockage, while an unexplained decrease may be due to leaks. A significant leak is likely to produce emissions visible to an outside observer. Therefore, these two criteria should detect malfunctions of the baghouse.

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-B4197-2011 are identified in Appendix 6 of the ROP.

PTI Number			
163-07	163-07B	167-07C	4-09
261-00	934-93	293-91	1007-84

#### **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 the MDEQ, 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 Janis Ransom, Cadillac 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.

State Registration Number

## RENEWABLE OPERATING PERMIT

**ROP Number** 

B4197

**OCTOBER 6, 2016 - STAFF REPORT ADDENDUM** 

MI-ROP-B4197-2016

#### **Purpose**

A Staff Report dated September 5, 2016, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). 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 R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

#### **General Information**

Responsible Official:	Mark Platko, General Manager 231-779-4856
AQD Contact:	Bill Rogers, Environmental Quality Analyst 989-705-3406

#### **Summary of Pertinent Comments**

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

#### Changes to the September 5, 2016 Draft ROP

No changes were made to the draft ROP.

**State Registration Number** 

## RENEWABLE OPERATING PERMIT

**ROP Number** 

B4197

JULY 11, 2017 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

MI-ROP-B4197-2016a

#### **Purpose**

On November 21, 2016, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B4197-2016 to AAR Mobility Systems pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

#### **General Information**

Responsible Official:	Mark Platko, General Manager
·	231-779-4856
AQD Contact:	Caryn E. Owens, Environmental Quality Analyst
	231-876-4414
Application Number:	201700079
Date Application For Minor Modification	
Was Submitted:	June 9, 2017

#### **Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

### **Description of Changes to the ROP**

Incorporate PTI 163-07D, which increases the VOC content limit for EU197LINENOCTRL. No other emission units at the facility are affected by the proposed project.

#### **Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

#### **Action Taken by the MDEQ**

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B4197-2016, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the U.S. Environmental Protection Agency (USEPA) has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.

**State Registration Number** 

#### RENEWABLE OPERATING PERMIT

**ROP Number** 

B4197

MAY 2, 2018 - STAFF REPORT FOR RULE 216(2)
MINOR MODIFICATION

MI-ROP-B4197-2016b

#### **Purpose**

On August 29, 2017, the Department of Environmental Quality, Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B4197-2016a to AAR Mobility Systems pursuant to R 336.1214. Once issued, a company is required to submit an application for changes to the ROP as described in R 336.1216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to R 336.1216(2).

#### **General Information**

Responsible Official:	Mark Platko, General Manager 231-779-4856
AQD Contact:	Caryn E. Owens, Environmental Engineer 231-878-6688
Application Number:	201800046
Date Application for Minor Modification Was Submitted:	March 29, 2018

#### **Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to R 336.1216(2).

#### **Description of Changes to the ROP**

Minor Modification Application Number 201800046 was to Incorporate PTI 183-17, which was to modify an existing coating line (EUCONTAINERLINE) that will operate with VOC capture efficiency of 96% and be controlled by the existing regenerative thermal oxidizer (RTO). This is to use new product that will require the priming and painting of large matts. The PTI application was not required to go through the public participation process.

#### **Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

#### **Action Taken by the MDEQ**

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B4197-2016a, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the USEPA has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.

#### Michigan Department of Environment, Great Lakes and Energy Air Quality Division

State Registration Number

## RENEWABLE OPERATING PERMIT

ROP Number
MI-ROP-B4197-2016c

B4197

MARCH 6, 2019 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

### **Purpose**

On June 18, 2018, the Michigan Department of Environment, Great Lakes and Energy (EGLE), AQD, approved and issued ROP No. MI-ROP-B4197-2016b to AAR Mobility Systems pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(2).

#### **General Information**

Responsible Official:	Mark Platko, General Manager 231-779-4856
AQD Contact:	Caryn E. Owens, Environmental Engineer 231-878-6688
Application Number:	201800133
Date Application for Minor Modification was Submitted:	October 24, 2018

## **Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for a Minor Modification pursuant to Rule 216(2).

#### **Description of Changes to the ROP**

Minor Modification Application Number 201800133 was to modify the MACT requirements back to the specific requirements that were established in PTI 163-07C in FGMACT, and to clarify when the permittee is able to use the Emission rate without add-on controls option, emission rate with add-on controls option, and the compliance material option. AAR Mobility Systems also requested to incorporate PTI 183-17 into the ROP, but this PTI was incorporated under the Minor Modification Number 201800046 that was issued on June 18, 2018.

### **Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Minor Modification to the ROP.

### **Action Taken by EGLE**

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B4197-2016b, as requested by the stationary source. A final decision on the Minor Modification to the ROP will not be made until any affected states and the USEPA has been allowed 45 days to review the proposed changes to the ROP. The delegated decision maker for the AQD is the District Supervisor. The final determination for approval of the Minor Modification will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other requirements, and resolution of any objections by any affected states or the USEPA.