



**State Registration
Number
B7205**

Michigan Department of Environmental Quality
Air Quality Division

RENEWABLE OPERATING PERMIT

STAFF REPORT

ROP Number

MI-ROP-B7205-2009

Guardian Fiberglass Inc.

SRN: B7205

Located at

1000 East North Street, Albion, Michigan 49224

Permit Number: MI-ROP-B7205-2009

Staff Report Date: June 22, 2009

Revision Date: August 12, 2009

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 Environmental Quality (MDEQ), 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

ROP Number

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July 6, 2009 STAFF REPORT

Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a 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 report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit 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:	Guardian Fiberglass Inc. 1000 East North Street Albion, Michigan 49224
Source Registration Number (SRN):	B7205
North American Industry Classification System (NAICS) Code:	327993
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	200800139
Responsible Official:	Terry Fisher, Plant Manager 517-630-2729
AQD Contact:	Dale Turton, Environmental Engineer 269-567-3554
Date Permit Application Received:	December 4, 2008
Date Application Was Administratively Complete:	December 16, 2008
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	June 22, 2009
Deadline for Public Comment:	August 6, 2009

Source Description

This facility is a manufacturer of fiberglass insulation (wool). The source uses four melters to make molten glass from raw materials and recycled glass. The molten glass is then spun into glass fibers. Some of the material is sprayed with resin and some is left non-resinated. There are two resinated lines and two non-resinated lines. Some of the material is formed into mats and cured, and some is diced into a form that can be blown into attics, etc. All material, whether in bats or loose, is then bagged for shipping. The primary source of emissions are from the glass melters, the forming chambers, the curing ovens, and the cooling sections.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2008** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	217
Nitrogen Oxides (NO _x)	11
Particulate Matter (PM)	102
Sulfur Dioxide (SO ₂)	0.6
Volatile Organic Compounds (VOCs)	123
Ammonia	113
Individual Hazardous Air Pollutants (HAPs) **	
Phenol	4.9
Formaldehyde	4.4
Methanol	18.1
Total Hazardous Air Pollutants (HAPs)	27.4

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

See Parts C and D in the draft 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 Calhoun 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 CO, VOCs, and PM10 exceeds 100 tons per year.
- 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.

The stationary source was subject to review under the Prevention of Significant Deterioration regulations of 40 CFR, Part 52.21, because at the time of New Source Review permitting the potential to emit of CO, VOCs, and particulate matter was greater than 100 tons per year.

EU-RES1 and EU-RES2 at the stationary source are subject to the New Source Performance Standards for fiberglass wool promulgated in 40 CFR, Part 60, Subparts A and PPP.

EU-RES1, EU-RES2, EU-EM6, EU-EM7, EU-EM8, EU-EM9, EU-BINDERMIX, at the stationary source is subject to the Maximum Achievable Control Technology Standards for fiberglass wool promulgated in 40 CFR, Part 63, Subparts A and NNN.

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

FG-RES2 and FGMELT6, 7, and 9 at the stationary source are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64. The groupings of emission units making up the two flexible groups have control devices and potential pre-control emissions of PM10 greater than the major source threshold level.

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-B7205-2009 are identified in Appendix 6 of the ROP.

PTI Number			
282-02	282-02A	282-02B	

Equivalent Requirements

This permit does not include any equivalent requirements pursuant to Rule 212(5). Equivalent requirements are enforceable applicable requirements that are equivalent to the applicable requirements contained in the original PTI, a Consent Order/Judgment, and/or the State Implementation Plan.

Non-applicable Requirements

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

Exempt Emission Unit ID	Description of Exempt Emission Unit	ROP Exemption	PTI Permit Exemption
DVHEATER1	2 - 250,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER2	1 - 30,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER3	5 - 200,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER4	15 - 90,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER5	13 - 150,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER6	10 - 60,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER7	1 - 100,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER8	3 - 225,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER9	1 - 300,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER10	1 - 360,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER11	3 - 76,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER12	1 - 45,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER13	4 - 95,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER14	3 - 70,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER15	3 - 80,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER16	3 - 230,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER17	1 - 210,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER18	1 - 175,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER19	4 - 125,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER20	2 - 120,000 BTU natural gas fired space heaters	R 336.212(4)(b)	R 336.282(b)
DVHEATER21	1 - 50,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)
DVHEATER22	1 - 75,000 BTU natural gas fired space heater	R 336.212(4)(b)	R 336.282(b)

Draft ROP Terms/Conditions Not Agreed to by Applicant

This permit 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

The AQD proposes to approve this permit. 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 permit 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 Ms. Mary Douglas, Kalamazoo District Supervisor. The final determination for ROP approval/disapproval 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 terms and conditions, and resolution of any objections by the USEPA.



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August 12, 2009 STAFF REPORT ADDENDUM

Purpose

A Staff Report dated June 22, 2009, was developed in order to set forth the applicable requirements and factual basis for the draft 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:	Terry Fisher, Plant Manager 517-630-2729
AQD Contact:	Dale Turton, Environmental Engineer 269-567-3554

Summary of Pertinent Comments

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

Changes to the July 6, 2009 Draft ROP

No changes were made to the draft ROP.