

State Registration Number
B7205

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B7205-
2021a

Knauf Insulation, Inc.

State Registration Number (SRN): B7205

Located at

1000 East North Street, Albion, Calhoun County, Michigan 49224

Permit Number: MI-ROP-B7205-2021a

Staff Report Date: June 7, 2021

Amended Date: April 12, 2022

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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State Registration Number

B7205

RENEWABLE OPERATING PERMIT

June 7, 2021 STAFF REPORT

ROP Number

MI-ROP-B7205-2021

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:	Knauf Insulation, 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:	201900196
Responsible Official:	Kevin Keen, Plant Manager 517-630-2038
AQD Contact:	Amanda Chapel, Senior Environmental Quality Analyst 269-910-2109
Date Application Received:	December 2, 2019
Date Application Was Administratively Complete:	December 2, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 7, 2021
Deadline for Public Comment:	July 7, 2021

Source Description

Knauf Insulation LLC (Facility) is a manufacturer of wool fiberglass insulation. The Facility is located in Albion, Michigan. The area surrounding the Facility is mainly residential with a few other industries to the east and south.

The Facility uses four electric 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 currently the following lines at the facility: one resinated line (FG-ML2ALB) and two non-resinated lines (EU-WBW1ALBFORMING and EU-WBW2ALBFORMING making FG-WBWALBFORMING). A permit was issued in 2020 to install a third non-resinated line (EU-WBW3ALBFORMING). These lines are controlled with a variety of high efficiency wet scrubbers, venturi scrubbers, and wet electrostatic precipitators. 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 batts or loose, is then bagged for shipping. The primary source of emissions are from the glass melters, forming chambers, curing ovens, and cooling sections.

Since the last ROP was issued, the facility has converted process equipment from Guardian to Knauf technology. This includes changing to a different binder that no longer contains any hazardous air pollutants (HAPs). Because of this 2015 change, the facility is no longer a major source of HAPs and is not subject to 40 CFR Part 63, Subpart NNN, National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing.

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)	75.76
Nitrogen Oxides (NO _x)	11.82
Particulate Matter (PM)	117.78
Sulfur Dioxide (SO ₂)	1.84
Volatile Organic Compounds (VOCs)	30.50

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2019 by the AQD:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Formaldehyde	0.0003
Benzene	0.0002
Acetaldehyde	0.0002
Total Hazardous Air Pollutants (HAPs)	0.0007

**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 carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter (PM) exceeds 100 tons per year.

The stationary source is a minor source of HAP emissions because the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year. Knauf changed the binder formulation technology formerly used by Guardian Fiberglass which contained two HAPs, phenol and formaldehyde. This change in binder formulation resulted in Knauf becoming a minor source of HAPs.

The facility currently has two active PTIs Nos. 26-15D and 132-19A. PTI No. 26-15D was for installation of a dedusting agent mix tank and use of new dedusting agents in EU-ML2ALBFORMING which is part of FG-ML2ALB. PTI No. 132-19A was for installation of a new line, EU-WBW3ALBFORMING at the facility. This line is replacing FG-ML1ALB.

EU-MATHAND, EU-FURNACE#2, EU-FACESIZEPKG, EU-WBW3ALBFORMING, EU-BINDERMIX, EU-ML2ALBFORMING, FG-ML2ALB, FG-WBWALBFORMING, FG-FURNACE1, 3 and 4, FG-FIBERIZATION, 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 CO, VOC, and PM was greater than 100 tons per year.

EU-WBW3ALBFORMING, FG-ML2ALB, and FG-WBWALBFORMING at the stationary source are subject to the Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants promulgated in 40 CFR Part 60, Subparts A and PPP.

EU-GENENGINES, including two Generic 437 hp emergency diesel engines were removed from the facility. These were formerly subject to Standards for Performance for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subpart IIII.

EU-DETROITDSL1, EU-DETROITDSL2, EU-ML2GEN, and EU-ALLEYGEN at the stationary source are subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. EU-DETROITDSL1 and EU-DETROITDSL2 are existing engines smaller than 500 bhp located at an area source of HAPs. EU-ML2GEN is an existing engine larger than 500 bhp located at an area source of HAPs.

Diesel fuel-fired engine generator EU-ALLEYGEN at the stationary source are subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII. EU-ALLEYGEN is also subject to the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) promulgated in 40 CFR Part 63, Subparts A and ZZZZ. EU-ALLEYGEN was manufactured in August 2006, is rated at 900 HP, and has a total displacement of 18.1 liters. Compliance with requirements promulgated in 40 CFR Part 60, Subparts A and IIII show compliance with the National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

Various emission units at the stationary source were previously subject to the National Emission Standard for Hazardous Air Pollutants for Wool Fiberglass Manufacturing promulgated in 40 CFR Part 63, Subparts A and NNN. Knauf changed the binder formulation technology formerly used by Guardian Fiberglass which contained phenol/formaldehyde. EU-BINDERMIX contains a legally binding and enforceable condition that the facility will not use binders containing phenol/formaldehyde, thus avoiding applicability

with 40 CFR Part 63, Subpart NNN. The legally enforceable conditions preventing the use of phenol/formaldehyde at the facility limits the potential to emit of HAPs below major source thresholds.

Guardian Fiberglass was purchased by Knauf Insulation, Inc. in 2015. Knauf converted the existing technology to Knauf technology, including replacing an existing hazardous air pollutant (HAP) containing binder with one that does not contain HAPs, exempting them from 40 CFR Part 63 Subpart NNN. The facility used a similar plant to determine emission limits in their PTI covering the technology conversion. During a stack test required by the permit, the facility exceeded PM10 emissions limits on FG-ML2ALB and EU-WBWALBFORMING, resulting in a violation notice (VN) issued in October 2016.

In June 2017, a VN was issued citing the exceedances as a violation of Prevention of Significant Deterioration (PSD) regulations. This was considered a High Priority Violation (HPV) and resulted in an Administrative Consent Order (ACO) between EGLE and the facility. Order No. 2018-17 contained a financial penalty, Supplementary Environmental Plan (SEP), and additional permit requirements the facility was obligated to meet. The facility met the obligations in the ACO and applied for termination on January 20, 2021. The ACO was terminated on March 19, 2021 and is considered resolved.

In March 2019, the facility exceeded PM/10/2.5 emission limits on FG-WBWALBFORMING during a stack test and was issued a VN. The facility completed a second stack test in May 2019. Results showed the facility was in compliance with PM/10/2.5 emissions limits. The VN is considered resolved by the AQD.

The AQD's Rules 287 and 290 were revised on December 20, 2016. FGRULE287(2)(c) and FGRULE290 are flexible group tables created for emission units subject to these rules. Emission units installed before December 20, 2016, can comply with the requirements of Rule 287 and Rule 290 in effect at the time of installation or modification as identified in the tables. However, emission units installed or modified on or after December 20, 2016, must comply with the requirements of the current rules as outlined in the tables.

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."

EU-ML2ALBFORMING contained in FG-ML2ALB, EU-WBW1ALBFORMING and EU-WBW2ALBFORMING contained in FG-WBWALBFORMING, and EU-WBW3ALBFORMING, have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because the unit(s) does have potential pre-control emissions over the major source thresholds. PM emissions are controlled by a variety of Fisher Klosterman Venturi Scrubbers, bag filters, and a wet electrostatic precipitator.

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-ML2ALBFORMING	PM 5.59 lb/ton glass pulled	R 336.1331 R 336.2810	Fisher Klosterman Venturi Scrubbers, a mix of 650, 850, and 1100's	Continuous monitoring and recording of pressure drop. Parameters established during stack testing. Alarms more than 5%	FG-CAMUNITS	No
	PM10 5.59 lb/ton glass pulled	R 336.2810				
	PM10 25.19 pph	R 336.2803 R 336.2804 R 336.2810				

Emission Unit/Flexible group ID	Pollutant/Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/Flexible Group for CAM	PAM? *
	PM2.5 5.59 lb/ton glass pulled PM2.5 25.19 pph	R 336.2810 R 336.2803 R 336.2804 R 336.2810		during a 6-month period. Continuous recording of water flow. Parameters established during stack testing. Alarms more than 5% during a 6-month period.		
FG-WBWALBFORMING	PM 5.33 lb/ton glass pulled PM 23.98 pph PM10 5.33 lb/ton glass pulled PM10 23.98 pph PM2.5 5.33 lb/ton glass pulled PM2.5 23.98 pph	R 336.1331 R 336.2810 R 336.2810 R 336.2803 R 336.2804 R 336.2810 R 336.2810 R 336.2803 R 336.2804 R 336.2810	Venturi Scrubbers (4); cyclone with internally vented screen room and bag filters	Continuous monitoring and recording of pressure drop. Parameters established during stack testing. Alarms more than 5% during a 6-month period. Continuous recording of water flow. Parameters established during stack testing. Alarms more than 5% during a 6-month period.	FG-CAMUNITS	No
EU-WBW3ALBFORMING	PM 2.34 lb/ton glass pulled PM10 2.34 lb/ton glass pulled PM2.5 2.34 lb/ton glass pulled	R 336.1331 40 CFR 52.21 (c) & (d) 40 CFR 52.21 (c) & (d)	Venturi Scrubbers (2); Wet Electrostatic Precipitator (WESP)	Scrubber: Continuous monitoring and recording of pressure drop. Parameters established during stack testing. Alarms more than 5% during a 6-month period.	FG-CAMUNITS	No

Emission Unit/Flexible group ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/Flexible Group for CAM	PAM? *
				<p>Continuous recording of water flow. Parameters established during stack testing. Alarms more than 5% during a 6-month period.</p> <p>WESP: Continuous monitoring and recording of current. Parameters established during stack testing. Alarms more than 5% during a 6-month period.</p> <p>Continuous monitoring and recording of voltage. Parameters established during stack testing. Alarms more than 5% during a 6-month period.</p> <p>Water flow through WESP is continuously monitored and recorded. Parameters established during stack testing. Alarms more than 5% during a 6-month period.</p>		

Emission Unit/Flexible group ID	Pollutant/Emission Limit	UAR(s)	Control Equipment	Monitoring (Include Monitoring Range)	Emission Unit/Flexible Group for CAM	PAM? *
				Solids content is measured once per day.		

*Presumptively Acceptable Monitoring (PAM)

All Emission Units (EUs) within the CAM Plan are subject to 40 CFR Part 60, Subpart PPP. Subpart PPP allows the source to determine compliance either through wet scrubber control or a wet electrostatic precipitation control.

EU-ML2ALBFORMING, EU-WBW1ALBFORMING, and EU-WBW2ALBFORMING were pre-existing EUs when Knauf Insulation acquired the facility. During the construction of these EUs, wet scrubbers were selected as control. The scrubber differential pressure and water flow rate were selected as the indicators of control device performance. Differential pressure is proportional to flow through the venturi throat while water flow is necessary for proper particulate matter (PM) control. This monitoring was established in the permit to show compliance with the 11.0 lb/ton of glass pulled 2-hour average limit from 40 CFR Part 60, Subpart PPP. This monitoring also serves as CAM to show compliance with the other established PM, PM10, and PM2.5 limits, making the monitoring PAM.

EU-WBW3ALBFORMING was reconstructed and both controls were elected to provide greater control efficiency. Scrubber controls were selected to maintain consistency between all emissions units at the facility. The WESP control were established based on the parameters in 40 CFR Part 60, Subpart PPP. PM and water suspended in the gas stream are electrically charged within the WESP as they pass through the electric fields of the device's electrodes: PM is collected on the electric though the difference in charge and they migrate within the WESP. Subpart PPP lists current and voltage as measurements of the effectiveness of the electrodes, and therefore retention of the PM. This monitoring was established in the permit to show compliance with the 11.0 lb/ton of glass pulled 2-hour average limit from 40 CFR Part 60, Subpart PPP. This monitoring also serves as CAM to show compliance with the other established PM, PM10, and PM2.5 limits, making the monitoring PAM.

Solids content with the WESP is not included as monitoring but to ensure the WESP continues to function. There is no data indicating a decrease in effectiveness of a WESP from solids content between 0.5%-1%. Rather, it is an indicator that the WESP would become corroded and unable to perform if solids contents exceed 2%.

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-B7205-2015b are identified in Appendix 6 of the ROP.

PTI Number			
282-02	282-02A	282-02B	282-02D
282-02E	177-12B	133-14	

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
Gasoline Tank 1	175 gallon gasoline tank	R 336.1212(4)(d)	R 336.1284(2)(g)
DV-HEATER-7	150,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-8	150,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-10	60,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-11	60,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-12	60,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-13	150,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-14	60,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-16	90,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-18	60,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-27	100,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-28	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-31	90,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-32	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-33	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
DV-HEATER-36	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-37	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-38	225,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-46	76,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-47	76,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-48	66,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-50	110,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-51	135,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-52	110,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-53	90,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-54	90,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-55	100,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-67	360,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-68	225,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-69	225,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-70	225,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-72	90,000 BTU natural gas fired space heaters (3)	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-73	150,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-74	230,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-75	230,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-76	230,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-77	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-78	200,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-87	90,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-88	90,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
DV-HEATER-89	90,000 BTU natural gas fired space heaters (2)	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-90	60,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-102	1,500,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-103	1,500,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)
DV-HEATER-104	1,500,000 BTU natural gas fired space heater	R 336.1212(4)(c)	R 336.1282(2)(b)(i)

Draft ROP Terms/Conditions Not Agreed to by Applicant

Based on the company comment, minimal changes were made to the Draft ROP. In FG-NSPSIII special condition (S.C.) III.4, language was changed for clarity and to include both future purchases of engines subject to NSPS III and any changes to emission-related settings not permitted by the manufacturer for the existing engine subject to NSPS III.

Language was included in FG-CAMUNITS, reflective of language included in EU-WBW3ALBFORMING (PTI No. 132-19A), which allows for a change in monitoring of the WESP based on USEPA approval of alternative monitoring methods. This is currently waiting for a decision from USEPA.

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 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.

State Registration Number
B7205

RENEWABLE OPERATING PERMIT
July 19, 2021 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-B7205-2021

Purpose

A Staff Report dated June 7, 2021, 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:	Kevin Keen, Plant Manager 517-630-2038
AQD Contact:	Amanda Chapel, Senior Environmental Quality Analyst 269-910-2109

Summary of Pertinent Comments

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

Changes to the June 7, 2021 Draft ROP

No changes were made to the draft ROP.

State Registration Number
B7205

RENEWABLE OPERATING PERMIT
April 12, 2022 - STAFF REPORT FOR RULE 216(2)
MINOR MODIFICATION

ROP Number
MI-ROP-B7205-2021a

Purpose

On September 3, 2021, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B7205-2021 to Knauf Insulation, Inc. 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:	Kevin Keen, Plant Manager 517-630-2038
AQD Contact:	Caryn E. Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202200085
Date Application for Minor Modification was Submitted:	April 5, 2022

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 Number 202200085 was to incorporate PTI No. 132-19B into the ROP which is to convert a resinated fiberglass insulation line (Line 1) to the Knauf fiberization technology as a non-resinated line, and install two cooling towers (EU-COOLTOWER2 and EU-COOLTOWER3) that were not included in PTI No. 132-19A. The cooling towers are equipped with drift eliminators to minimize particulate emissions. PTI No. 132-19B 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 EGLE

The AQD proposes to approve a Minor Modification to ROP No. MI-ROP-B7205-2021, 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 United States 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.