

Michigan Department of Environmental Great Lakes, and Energy
Air Quality Division

State Registration Number
B4942

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-B4942-2020c

Corteva AgriScience LLC (Corteva)

State Registration Number (SRN): B4942

Located at

305 North Huron Avenue, Harbor Beach, Huron County, Michigan 48441

Permit Number: MI-ROP-B4942-2020c

Staff Report Date: June 15, 2020

Amended Dates: March 1, 2021
January 2, 2024
November 7, 2024

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

B4942

RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-B4942-2020

JUNE 15, 2020 - STAFF REPORT

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:	Dow AgroScience, L.L.C. 305 North Huron Avenue Harbor Beach, Michigan 48441
Source Registration Number (SRN):	B4942
North American Industry Classification System (NAICS) Code:	325320
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201900092
Responsible Official:	Lisa L. Callender, Site Leader 989-479-5258
AQD Contact:	Meg Sheehan, Environmental Quality Analyst 989-439-5001
Date Application Received:	May 16, 2019
Date Application Was Administratively Complete:	May 16, 2019
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	June 15, 2020
Deadline for Public Comment:	July 15, 2020

Source Description

Dow AgroScience, L.L.C. (DAS) is an insect pesticide production facility located at 305 North Huron Avenue, Harbor Beach, Michigan. It is bounded to the north by Buell Street, to the west by North Huron Avenue, and to the south by State Street. Directly east of the facility is Lake Huron. North Huron Avenue is composed of predominately business properties, with residential properties beginning approximately one block west of the facility. To the north of the facility are residential properties as well as a small industrial park.

The facility produces spinosyns for use in crop protection, human health, and animal health markets. Spinosyns are fermented from the bacteria *S. spinosa*. A mix of two spinosoids, spinosyn A and spinosyn D, produce a pesticide that is highly active both by contact and ingestion in numerous insect species and kills by impacting the insect nervous system. The site operates continuously.

A 20,000-gallon capacity anhydrous ammonia tank is used at the start of the production process. The manufacturing process consists of fermentation, extraction, crystallization, evaporation, filtration, centrifuge, vacuum, and drying process equipment. Emissions from the production process are vented to the thermal treatment units (TTUs) to primarily control volatile organic compounds (VOCs) and hazardous air pollutants (HAPs), as well as ammonia (NH₃) and particulate matter (PM) emissions. Emissions from the bioreactor are controlled by an enclosed flare.

Compressed air, steam, and chilled water required by the production process are supplied by an on-site power generation facility that was constructed by Solar Turbines, Inc. in 1999. The power generation facility consists of two air compressors powered by natural gas-fired turbines, two heat recovery steam generators (HRSG) and supplemental burners (duct burners) in the turbine exhaust duct, and two chiller units. Nitrogen oxide (NO_x) emissions are controlled by dry ultra-low NO_x burners (SoLoNO_x) for the turbines.

Solids handling processes used for packaging dry product are controlled by filters of the sock and cage style that use pulsed nitrogen to knock down accumulated dust prior to venting to the TTUs.

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)	30.15
Lead (Pb)	0
Nitrogen Oxides (NO _x)	85.60
Particulate Matter (PM)	0.53
Sulfur Dioxide (SO ₂)	0.33
Volatile Organic Compounds (VOCs)	31.13
Ammonia (NH ₃)	2.16

The following table lists Hazardous Air Pollutant emissions as calculated for the year 2019 by Dow AgroScience, L.L.C.:

Individual Hazardous Air Pollutants (HAPs) **	Tons per Year
Methanol	21.27
Total Hazardous Air Pollutants (HAPs)	21.27

**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 Huron 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 and the Prevention of Significant Deterioration (PSD) regulations of 40 CFR 52.51 because the potential to emit of carbon monoxide and nitrogen oxides exceeds 100 tons per year. The stationary source is also subject to 40 CFR Part 70, because 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 the potential to emit of all HAPs combined is equal to or more than 25 tons per year.

Although EUKOHLER38RCL and EUCOLDCLEANER were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. However, future modifications of this equipment may be subject to NSR.

EUKOHLER38RCL at the stationary source is subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and JJJJ.

EUNBURNER and EUSBURNER at the stationary source are subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units promulgated in 40 CFR Part 60, Subparts A and Dc.

EUNTURBINE and EUSTURBINE at the stationary source are subject to the Standards of Performance for Stationary Gas Turbines promulgated in 40 CFR Part 60, Subparts A and GG.

EUPROCESS at the stationary source is subject to the National Emission Standard for Hazardous Air Pollutants for Pesticide Active Ingredient Production promulgated in 40 CFR Part 63, Subparts A and MMM, and the National Emission Standard for Hazardous Air Pollutants for Organic Liquids Distribution (Non-Gasoline) promulgated in 40 CFR Part 63, Subparts A and EEEE.

Prior Non-Compliance Items

Two Violation Notices (VNs) were issued to DAS since the ROP was renewed in 2015 for NOx exceedances from FGUTILITIES and FGTURBINES. The turbines are equipped with SoLoNOx combustors which reduce NOx emissions by 85 percent over standard turbine combustors. However, during sub-zero (Fahrenheit) temperatures, the NOx control ceases to operate. During early winter in 2015, there were extended periods of time with sub-zero temperatures. When the control does not operate, the equipment has trouble meeting the emission limits.

On March 11, 2016, EGLE-AQD (formerly MDEQ) received the Annual Renewable Operating Permit Certification and Deviation Report from DAS. The report covered the reporting period of January 1, 2015 through December 31, 2015. DAS reported that on February 13, 15, 16, and 19, 2015, the SoLoNOx was offline due to low ambient temperatures. This resulted in violations of the 13.6 lb/hr NOx emission limit in Special Condition (SC) I.1 under FGUTILITIES. Estimated emissions and testing performed late in February 2015 indicated NOx emissions were exceeded for four days. A VN was issued to DAS on March 17, 2016.

On May 25, 26, 31, and June 1 and 2, 2016, stack testing on FGTURBINES was conducted to determine NOx emissions under turbine operating scenarios, including running with the SoLoNOx technology. On October 28, 2016, EGLE-AQD received emissions records for FGTURBINES as requested by email. The purpose of the request was to assist in a review of the test results. Based on emission factors established from the stack testing, DAS was not in compliance with the 3.8 lb/hr NOx (TEG & Turbine Running Modes) emission limit in SC I.2 under FGTURBINES in MI-ROP-B4942-2015 on June 21, September 1, October 6, 19, and 20, 2016. A second VN was issued to DAS on November 3, 2016.

To deal with periods of time when the SoLoNOx technology is non-operational, DAS submitted an application for PTI No. 303-98E on September 16, 2016 and requested to be allowed to operate uncontrolled for a limited number of hours. The PTI was subsequently issued on March 9, 2017. The issuance of this PTI was considered the resolution to the two previously mentioned VNs.

Permits To Install Issued Since Last ROP Renewal

303-98E

NOx and CO are the main pollutants effected when the turbines are operating or not operating in low NOx mode. PTI 303-98E addressed issues with previous reviews of those pollutants and new reviews of them while operating uncontrolled. A change in the method of operation was requested, but no physical change was required because of the project. It was not expected that there would be any relevant change to toxic air contaminants (TACs) or VOCs; therefore, the state rules related to those emissions were not reviewed.

Emission limits for NOx and CO during uncontrolled operation were added to the permit. In order to avoid review under PSD, the facility chose an hours of uncontrolled operation restriction (SC III.1 under FGTURBINES). To pass modeling, the stack heights were increased to 62 feet and the stack diameters were decreased to 42 inches for all four stacks.

166-17

PTI No. 166-17 was approved on December 18, 2017 and was for installation of additional fermentation equipment in EUPROCESS to increase production. Although equipment was added to EUPROCESS, the facility did not expect emissions to increase due to improvements in the solvent recovery operations and vent emission control technology. No significant changes were made to the ROP as a result of this PTI, and the primary focus of the PTI review was to determine compliance with Rule 225 for the various TACs emitted from EUPROCESS.

107-18

PTI No. 107-18 was approved on August 20, 2018 and added a fifth emission control combustor, a regenerative thermal oxidizer (RTO) known as TTU-870 to EUPROCESS. The new RTO is located with the four catalytic oxidizers (TTU-850 through TTU-865) and the five TTUs are used together to control emissions from a common vent stream. The additional TTU did not increase the facility's theoretical production capacity or its PTE for process emissions, but it did cause additional emissions of pollutants from natural gas combustion.

While the facility has obtained EPA approval for an alternate monitoring approach for the catalytic TTUs under 40 CFR Part 63, Subpart MMM, they did not pursue such an approach with the RTO. The permit requirement for a malfunction abatement plan (MAP) allows the facility to address ongoing compliance determinations under the NESHAP. The catalytic TTUs and the proposed RTO are subject to the same emission reduction requirements under 40 CFR Part 63, Subpart MMM, but have some different requirements under the MACT standard for operational parameter monitoring. The permit was revised to address both the catalytic TTUs and the RTO requirements.

107-18A

PTI No. 107-18A was approved on March 7, 2019. During installation of the new RTO for EUPROCESS permitted under PTI No. 107-18, the facility discovered that the delivered equipment's stack did not meet the stack parameter requirements in the PTI. DAS stopped construction and prepared a new PTI application to demonstrate that emissions would be acceptable with the as-delivered stack parameters. All required modeling was passed using the new stack parameters, and no additional changes to the PTI were required.

107-18B

PTI No. 107-18B was approved on March 31, 2020 and was for installation of three new fermentation reactors for EUPROCESS for increased spinosyn production. To accompany the new fermentation reactors, DAS also asked for increased emission limits for VOCs under EUPROCESS. FGSOLIDHAND was also reviewed under this PTI because the increased production in EUPROCESS would involve additional emissions from the equipment in this flexible group. The revised permit conditions clarify monitoring for the dust collectors, better identify the nature of the control devices, and update some conditions to current approaches.

EUPROCESS is subject to Rule 702 for VOCs, and Rules 224 and 225 for TACs. The project was not subject to PSD permitting, and none of the emission limits were set to restrict emissions below the threshold requiring PSD permitting.

Periodic Monitoring and Compliance Assurance Monitoring (CAM)

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."

EUAMMONIATK, EUKOHLER38RCL, EUNBURNER, EUSBURNER, EUNTURBINE, EUSTURBINE, and EUCOLDCLEANER do not have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because these emission units at the stationary source do not have a control device.

EUSOLIDHAND1, EUSOLIDHAND2, and EUSOLIDHAND3 do not have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because the units do not have potential pre-control emissions over the major source thresholds. EUSOLIDHAND1 is a product recovery device that is attached directly to the dryer and is integral to its operation. EUSOLIDHAND1 exhausts through EUSOLIDHAND2, which controls product PM emissions prior to the TTUs. EUSOLIDHAND3 is an air driven venturi style dust collector that exhausts to the in-plant environment. Pre-control emissions of PM were calculated by determining the pounds per hour of product entrained in the nitrogen exhaust prior to EUSOLIDHAND1. EUSOLIDHAND1 reclaims 99.9% of product and transfers it back to the dryer using a nitrogen pulse. The remaining PM sent to EUSOLIDHAND2 from EUSOLIDHAND1 is equivalent to approximately 0.59 tons per year.

The emission limitation(s) or standard(s) in EUPROCESS for Organic HAP as defined in 40 CFR 63.1361 at the stationary source with the underlying applicable requirement(s) of 40 CFR 63.1362(b) from EUPROCESS are exempt from the federal Compliance Assurance Monitoring (CAM) regulation pursuant to 40 CFR 64.2(b)(1)(i) because Organic HAP meet(s) the CAM exemption for NSPS or MACT proposed after November 15, 1990.

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

Emission Unit/Flexible group ID	Pollutant/ Emission Limit	UAR(s)	Control Equipment	Monitoring	PAM? *
EUPROCESS	VOC 10.4 lb/hr	R 336.1225 R 336.1702(a)	Four catalytic thermal treatment units: TTU-850 TTU-855 TTU-860 TTU-865	Combustion chamber temperature on a continuous basis	Yes
	VOC 43.7 tpy	R 336.1702(a)	One regenerative thermal oxidizer: TTU-870		

*Presumptively Acceptable Monitoring (PAM)

Because 40 CFR Part 63, Subpart MMM requires parameter monitoring for thermal treatment control devices used to meet Organic HAP process vent control requirements and the thermal treatment control will also treat VOC, 40 CFR Part 63 monitoring satisfies CAM as PAM.

The catalyst inlet and outlet temperatures, and gas flow rates for the TTUs are continuously monitored, recorded and stored. The process control computer at the facility maintains a firebox temperature greater than 650 degrees F (or other temperature determined during the most recent compliance demonstration) for TTU-850, TTU-855, TTU-860 and TTU-865. The temperature is measured by four temperature transmitters. The process control computer maintains a firebox temperature greater than 1500 degrees F (or other temperature as specified in the approved MAP) for TTU-870. The temperature is measured by two temperature transmitters, which are redundant. If one is off-line for service, the other controls the TTU-870 firebox temperature. Compliance with retention time is maintained by physical limitations of the blowers. The ceramic beds of the TTUs are periodically regenerated to maintain compliance with organic HAP and VOC emission limits.

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-B4942-2015 are identified in Appendix 6 of the ROP.

PTI Number			
142-95A	303-98A	299-03	299-03C
318-08	107-11	303-98B	303-98C

Streamlined/Subsumed Requirements

The following table lists explanations of any streamlined/subsumed requirements included in the ROP pursuant to Rules 213(2) and 213(6). All subsumed requirements are enforceable under the streamlined requirement that subsumes them.

Emission Unit/Flexible Group ID	Condition Number	Streamlined Limit/ Requirement	Subsumed Limit/ Requirement	Stringency Analysis
FGTURBINES	I.1	25 ppmvd (each turbine) of NOx for TEG & Turbine Running Modes on an hourly basis. (R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subpart A & GG)	167 ppmv (each turbine) of NOx for TEG & Turbine Running modes on an hourly basis. (40 CFR 60.332(a)(2))	The NOx limit determined through NSR and listed in condition I.1 is more stringent than the NOx limit in NSPS Subpart GG.

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
DVICENGINE	Natural gas fired internal combustion engine	R 336.1212(4)(e)	R 336.1285(2)(g)
FUELTANKS	Gasoline/diesel tank	R 336.1212(4)(c)	R 336.1284(2)(g)(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 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 Chris Hare, Bay City 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
B4942

RENEWABLE OPERATING PERMIT

JULY 16, 2020 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-B4942-
2020

Purpose

A Staff Report dated June 15, 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:	Lisa L. Callender, Site Leader 989-479-5258
AQD Contact:	Kathy Brewer, Senior Environmental Quality Analyst 989-439-2100

Summary of Pertinent Comments

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

Changes to the June 15, 2020 Draft ROP

No changes were made to the draft ROP.

State Registration Number

B4942

RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-B4942-2020a

MARCH 1, 2021 - STAFF REPORT FOR RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE AMENDMENT

Purpose

On September 1, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B4942-2020 to Dow AgroScience LLC. 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(1)(a)(i-iv).

General Information

Responsible Official:	Lisa L. Callender, Site Leader 989-479-5258
AQD Contact:	Caryn Owens, Environmental Engineer 231-878-6688
Application Number:	202100011
Date Application for Administrative Amendment was Submitted:	January 12, 2021

Regulatory Analysis

The AQD has determined that the change requested by the stationary source meets the qualifications for an Administrative Amendment pursuant to Rule 216(1)(a)(iv).

Description of Changes to the ROP

Administrative Amendment Number 202100011 was to update a company name change from Dow AgroSciences LLC (DAS) to Corteva AgriScience LLC (Corteva) that took place on January 1, 2021.

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 Administrative Amendment to the ROP.

Action Taken by EGLE

The AQD approved an Administrative Amendment to ROP No. MI-ROP-B4942-2020, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.

State Registration Number

B4942

RENEWABLE OPERATING PERMIT

JANUARY 2, 2024 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

ROP Number

MI-ROP-B4942-2020b

Purpose

On March 1, 2021, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B4942-2020a to Corteva AgriScience LLC (Corteva) 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 Soper, Site Leader
AQD Contact:	Caryn Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202300159
Date Application for Minor Modification was Submitted:	November 14, 2023

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 202300159 was to incorporate PTI No. 107-18C into the ROP renewal, which is to address formaldehyde emissions from the catalytic thermal treatment units (TTU's) and install a continuous monitor utilizing Fourier Transform Infrared Spectroscopy (FTIR) to ensure that total organic HAP concentrations do not exceed 20 ppm. The PTI 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-B4942-2020a, 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.

State Registration Number

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RENEWABLE OPERATING PERMIT

ROP Number

MI-ROP-B4942-2020c

NOVEMBER 7, 2024 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION

Purpose

On February 23, 2024, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B4942-2020b to Corteva AgriScience LLC 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 Soper, Site Leader
AQD Contact:	Caryn Owens, Senior Environmental Engineer 231-878-6688
Application Number:	202400194
Date Application for Minor Modification was Submitted:	October 4, 2024

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 202400194 was to incorporate PTI No. 107-18D into the ROP, which is to revise the OHAP emission limit averaging times to daily instead of hourly, change the VOC emission limits to specify that they include total OHAP, and add an hourly methanol emission limit. In addition, the catalytic thermal treatment units temperature requirement was changed in attempt to minimize conversion of methanol to formaldehyde.

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-B4942-2020b, 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.