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|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1548 | **STAFF REPORT** | MI-ROP-B1548-2020a |

**Post Foods, LLC**

State Registration Number (SRN): B1548

Located at

275 Cliff Street, Battle Creek, Calhoun County, Michigan 49015

Permit Number: MI-ROP-B1548-2020a

Staff Report Date: April 27, 2020

Amended Date: August 25, 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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|  | Michigan Department of Environmental QualityAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1548 | April 27, 2020 STAFF REPORT | MI-ROP-B1548-2020 |

**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: | Post Foods, LLC275 Cliff StreetBattle Creek, Michigan 49015  |
| Source Registration Number (SRN): | B1548 |
| North American Industry Classification System (NAICS) Code: | 311230 |
| Number of Stationary Source Sections: | 1 |
| Is Application for a Renewal or Initial Issuance? | Renewal |
| Application Number: | 201800137 |
| Responsible Official: | Ty Hakman, Plant Manager269-966-1000 |
| AQD Contact: | Monica Brothers, Environmental Quality Analyst269-312-2535 |
| Date Application Received: | November 2, 2018 |
| Date Application Was Administratively Complete: | November 2, 2018 |
| Is Application Shield in Effect? | Yes |
| Date Public Comment Begins: | April 27, 2020 |
| Deadline for Public Comment: | May 27, 2020 |

**Source Description**

Post Foods, LLC (Post Foods) is a cereal manufacturing facility. Operations at the plant include cooking, flaking, coating, drying, and packaging grain based ingredients such as wheat, rice, oats, and corn to produce ready-to-eat breakfast cereals. The facility is located in the southeast portion of downtown Battle Creek, in both an industrial and residential area. Other industrial facilities are located north of Post Foods, LLC, but it is mostly residential to the south.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2018**.

**TOTAL STATIONARY SOURCE EMISSIONS**

| **Pollutant** | **Tons per Year** |
| --- | --- |
| Carbon Monoxide (CO) | 14.22 |
| Nitrogen Oxides (NOx) | 59.26 |
| Particulate Matter (PM) | 68.26 |
| Sulfur Dioxide (SO2) | 0.22 |
| Volatile Organic Compounds (VOCs) | 34.44 |

\*\*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 NOx, VOC, and 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 than10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year.

The stationary source is considered a “synthetic minor” source in regards to the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of PM to less than 250 tons per year.

The stationary source is also subject to the federal regulations on ozone-depleting substances under 40 CFR Part 82.

EU\_52\_Fire at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ (RICE MACT). The ROP contains special conditions provided by Post Foods, LLC for applicable requirements from 40 CFR Part 63, Subparts A and ZZZZ. The AQD is not a delegated regulatory authority for this area source MACT; therefore, the special conditions for the MACT contained in FG-MACT4Z-Emerg were not reviewed by the AQD.

EUGasTank at the stationary source is subject to the National Emissions Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities promulgated in 40 CFR Part 63, Subparts A and CCCCCC. The ROP contains special conditions provided by Post Foods, LLC for applicable requirements from 40 CFR Part 63, Subparts A and CCCCCC. The AQD is not a delegated regulatory authority for this area source MACT; therefore, the special conditions for the MACT contained in EUGasTank were not reviewed by the AQD.

Post Foods, LLC is in compliance with all applicable requirements of this ROP except for FG2983CoatOxdOn, SC IV.2. On December 10, 2019, the AQD sent Post Foods, LLC a Violation Notice because stack test results showed that the facility was unable to comply with the required 85.5% combined capture and destruction efficiency for their catalytic oxidizer. The facility’s Violation Notice response indicated that they plan to either conduct a retest or modify their permit to remedy the issue. As a result, the permittee was required to submit a Schedule of Compliance, which will be outlined in Appendix 2 of this ROP.

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."

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? \*** |
| --- | --- | --- | --- | --- | --- | --- |
| EU407 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 407 | Daily Opacity Checks | FGCAM\_UNITS |  |
| EU417 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 417 | Daily Opacity Checks | FGCAM\_UNITS |  |
| EU418 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 418 | Daily Opacity Checks | FGCAM\_UNITS |  |
| EU419 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 419 | Daily Opacity Checks | FGCAM\_UNITS |  |
| EU420 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 420 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU427 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 427 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU430 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 430 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU433 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 433 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU435 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 435 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU492 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 492 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU1101 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 1101 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU1701 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 1701 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU1702 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 1702 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU1703 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 1703 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU1723 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 1723 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2001 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2001 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2011 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2011 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2027 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2027 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2032 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2032 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2035 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2035 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2091 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Wet Scrubber 2091 and Aerodyne 2091 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2092 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Wet Scrubber 2092 and Aerodyne 2092 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2101 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2101 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2910 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2910 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2914 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 2914 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2922 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Aerodyne 2922 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU2928 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 2928 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU29122 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Horiz Dust Sep 29122 and Wet Scrubber 29122 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU32109 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Baghouse 32109 | Daily Opacity Checks | FGCAM\_UNITS | No |
| EU32113 | PM10 | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Cyclone 32113 and Wet Scrubber 32113 | Daily Opacity Checks | FGCAM\_UNITS | No |
| FG2983CoatOxdOn | VOC | 40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2), 40 CFR 64.7(d)  | Catalytic Oxidizer 29113 | Continuous monitoring of inlet and outlet temperatures | FGCAM\_UNITS | No |

\*Presumptively Acceptable Monitoring (PAM)

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-B1548-2014 are identified in Appendix 6 of the ROP.

| **PTI Number** |
| --- |
| 626-93A | 380-92 | 76-07 | 76-07A |
| 76-07B | 76-07C | 76-07D | 213-04 |
| 76-07E | 149-11 | 1-12 | 208-10A |
| 36-13 | 63-13 | 76-07F | 128-13 |
| 128-13A |       |       |       |

**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** |
| --- | --- | --- | --- |
| EU-NAT-GAS\_EQUIP | Miscellaneous equipment that burns natural gas | Rule 212(4)(c) | Rule 282(2)(b)(i) |
| EUGasTank | One 1,000 gallon, above ground fuel storage tank | Rule 212(4)(d) | Rule 284(2)(g)(ii) |
| EU\_31\_DieselTank1 | One 2,000 gallon, above ground diesel storage tank in Building 31 | Rule 212(4)(d) | Rule 284(2)(g)(ii) |
| EU\_31\_DieselTank2 | One 500 gallon, above ground diesel storage tank in Building 31 | Rule 212(4)(d) | Rule 284(2)(g)(ii) |
| EU\_52\_DieselTank | One 130 gallon, above ground diesel storage tank in Building 52 | Rule 212(4)(d) | Rule 284(2)(g)(ii) |

**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 at the time of issuance of the ROP except for requirements listed in Appendix 2. The table in Appendix 2 contains a Schedule of Compliance developed pursuant to Rule 119(a)(i). The applicant must adhere to this schedule and provide the required certified progress reports at least semiannually or in accordance with the schedule in the table. A Schedule of Compliance for any applicable requirement that the source is not in compliance with at the time of ROP issuance is supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.

**Action taken by the 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 Mr. 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.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1548 | June 3, 2020 - STAFF REPORT ADDENDUM | MI-ROP-B1548-2020 |

**Purpose**

A Staff Report dated April, 27, 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: | Ty Hakman, Plant Manager269-966-1000 |
| AQD Contact: | Monica Brothers, Environmental Quality Analyst269-312-2535 |

**Summary of Pertinent Comments**

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

**Changes to the April 27,2020 Draft ROP**

No changes were made to the draft ROP.

|  |  |  |
| --- | --- | --- |
|  | Michigan Department of Environment, Great Lakes, and EnergyAir Quality Division |  |
| **State Registration Number** | **RENEWABLE OPERATING PERMIT** | **ROP Number** |
| B1548 | August 25, 2020 - STAFF REPORT FOR RULE 216(2) MINOR MODIFICATION | MI-ROP-B1548-2020a |

**Purpose**

On July 22, 2020, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B1548-2020 to Post Foods, 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: | Ty Hakman, Plant Manager269-966-1000 |
| AQD Contact: | Caryn Owens, Environmental Engineer231-878-6688 |
| Application Number: | 202000117 |
| Date Application for Minor Modification was Submitted: | July 20, 2020 |

**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 202000117 was to incorporate PTI 38-20. PTI 38-20 was for control equipment reconfiguration to existing equipment EU487 and EU488. References to EU487 were removed from FGBLD-4Rice/Bran.

**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-B1548-2020, 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.