RENEWABLE OPERATING PERMIT: STAFF REPORT

Otsego Paper, Inc.

Staff Report Date: November 11, 2024

State Registration Number (SRN): A0023

Located: 320 North Farmer Street, Otsego, Allegan County, Michigan 49078

Renewable Operating Permit Number: MI-ROP-A0023-20XX

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Air Quality Division Decision Maker: Julie Brunner, ROP Central Unit Supervisor

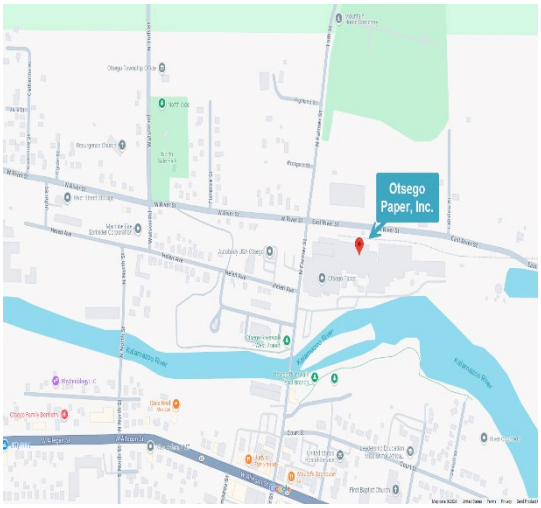

Figure 1: Otsego Paper, Inc.

Rule 214(1) of the administrative rules promulgated under Section 5506 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), prepare a draft permit and a report (Statement of Basis) that sets forth the applicable requirements and factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

As part of EGLE's Limited English Proficiency Plan, an evaluation of the number of people who speak English "less than very well" was conducted within a 1-mile radius of the location using an environmental justice screening tool like the USEPA's EJSCREEN. If any additional languages were determined to be required, translation of the public notice will be done into any languages identified during the evaluation. If translation into other languages is needed or if there are other accessibility concerns, requests may be sent to EGLE-Accessibility@Michigan.gov.

Contents

Introduction

The Title V operating permit program is a national permitting system required by Title V of the Federal Clean Air Act of 1990, codified in Title 40 of the Code of Federal Regulations (CFR) Part 70, and is administered by each state. In Michigan, these permits are known as a Renewable Operating Permit (ROP). A Renewable Operating Permit or ROP is a specific type of air permit a source must have when emissions of air pollutants are above certain levels.

The ROP is intended to clarify a stationary source's applicable requirements and outlines compliance with them by consolidating all state and federal air quality requirements into one document. An ROP contains more monitoring, testing, recordkeeping, and reporting requirements than a permit for a facility with low levels of emissions.

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a Renewable Operating Permit (ROP) pursuant to Title V of the federal Clean Air Act and Michigan's Administrative Rules for Air Pollution Control promulgated under Section 5506 of Act 451. Sources subject to the ROP Program are defined in Rule 211.

An ROP consists of five parts. Part A contains the general conditions. Part B contains special conditions, if any, that apply source wide. Parts C and D contain special conditions for all processes at the stationary source that are subject to process-specific emission limits or standards. Part E lists non-applicable requirements. The ROP also contains eight or more appendices which detail various supplementary information or requirements. The purpose of this staff report is to provide information about the facility, what the facility does, the air quality rules and regulations that apply, compliance status, and the final action taken by EGLE, AQD.

Section 1: General Source Information

Source Description

Otsego Paper, Inc. (Facility) is located within city limits at the northeast edge of the city of Otsego and is neighbor to several other industrial sites. The Facility is set on the north bank of the Kalamazoo River. South of the river and the Facility is a shopping district surrounded by residential areas.

The Facility is a wallboard (gypsum) paper manufacturer that produces paper from recycled stock and is a fully owned subsidiary of the United States Gypsum Company (USG). The Facility has one paper machine powered by a combined heat and power (CHP) plant consisting of two natural gas-fired combustion turbines with duct burners and heat recovery steam generators (HRSG). The furnish used in the Facility consists of 100 percent recycled paper and corrugated materials. The paper machine has three fourdriniers and is capable of producing a triple ply sheet.

The main pollutants emitted from the paper machine are volatile organic compounds (VOCs). The main pollutants emitted from the combustion turbines, space heaters, fire pumps and emergency generator are nitrogen oxides (NOx) and carbon monoxide (CO). The paper machine and the turbines are equipped with low NOx burners for pollution control. NOx emissions from the turbines and duct burners are monitored by continuous emissions monitoring systems (CEMS) that undergo annual Relative Accuracy Test Audits (RATAs).

Changes Made to the Source Since the Last Renewal

Since the last ROP was issued in 2019, a minor modification to incorporate Permit to Install (PTI) No. 193-19A was issued on August 30, 2021. The Facility increased paper machine production by approximately 17.5% which increased the demand for electricity and steam from the CHP plant. Natural gas-fired space heaters (EUWAREHOUSEHTRS) were added in that modification and the package boiler (EUPACKAGEBOIL) was removed.

Section 2: Facts and Basis

The following table provides information about the application, facility contacts, and important dates related to the ROP.

ROP Details

North American Industry Classification System (NAICS) code:	322121
NAICS Name:	Paper (except Newsprint) Mills
Is Application for an Initial or Renewal Issuance?	Renewal
Application Number:	202300100
Responsible Official:	Eric A. Bock, Plant Manager – USG Otsego
Date Application Received:	June 7, 2023
Date Application Was Administratively Complete:	June 7, 2023
Is Application Shield* in Effect?	Yes
Date Public Comment Begins:	November 11, 2024
Date Public Comment Ends:	December 11, 2024

* An application shield allows a Title V subject source, the ability to continue operating until final action is taken on the permit application provided the applicant submitted a timely and administratively complete application, and provides timely responses to information requests during the application review.

The following table lists the potential emissions, and actual annual emissions of regulated air pollutants as reported to AQD for the year 2023. The source must submit records of actual emissions for the pollutants listed in the table every year.

Total Annual Emissions

Pollutant	Potential Emissions in Tons per Year	Actual Emissions in Tons per Year
Carbon Monoxide (CO)	210.02	0.17
Nitrogen Oxides (NOx)	381.23	58.31
Particulate matter (PM) less than or equal to 10 microns in diameter (PM10)	19.02	1.35
Sulfur Dioxide (SO_2)	3.19	0.46
Volatile Organic Compounds (VOCs)	96.46	63.74

This source is an area source of hazardous air pollutant (HAP) emissions as listed pursuant to Section 112(b) of the federal Clean Air Act. No HAP emissions data is listed.

Source-Wide Permit to Install (PTI)

A Permit to Install (PTI) provides permission to a source to install a process and emit air contaminants up to certain specified levels. These levels are set by state and federal laws and regulations to protect health and welfare. By staying within the levels set by a PTI, a stationary source is operating lawfully, and public health and air quality are protected. Michigan's PTI Program includes major and minor New Source Review (NSR) and synthetic minor permitting.

The purpose of the ROP is to consolidate all existing air quality requirements including PTI(s) for a facility into one permit. The ROP conditions will focus on monitoring, testing, recordkeeping and reporting to ensure compliance with limits or restrictions established in PTI(s) or by other applicable air quality requirements.

Michigan Rule 214a requires the issuance of a Source-Wide PTI contained within the same document as the ROP to include all conditions established pursuant to Rule 201 Permits to install. All terms and conditions that are established in a PTI are identified with a footnote designation in the ROP.

The following table lists the individual PTIs that are currently incorporated into this ROP. PTIs incorporated with the issuance of this ROP are identified in Appendix 6 of the ROP.

PTIs included in the Source-Wide PTI.

PTI Number	Date Issued	Process Description (Emission Unit IDs)	Basis for Applicable Requirements
193-19A	April 22, 2021	Combined heat and power processes (EUTURBINE1, EUDUCTBURNER1, added EUWAREHOUSEHTRS, modify EUTURBINE2 and EUDUCTBURNER2 applicable requirements)	Minor New Source Review (NSR), Synthetic Minor Opt-out for NOx
11-22	February 1, 2022	Paper machine (updated stacks for EUPAPERMACHINE1)	Minor NSR

Air Quality Rules and Regulations

This section gives basic information about air quality rules and regulations that apply to the source and are included in the ROP.

Source Type by Pollutant

Pollutant	Title V Major Source	Major NSR Source	Major Nonattainment NSR Source	Synthetic Minor NSR Source	Major HAP Source	Synthetic Minor HAP Source	Area HAP Source
CO	Yes						
Lead							
NOx	Yes			Yes			

Pollutant	Title V Major Source	Major NSR Source	Major Nonattainment NSR Source	Synthetic Minor NSR Source	Major HAP Source	Synthetic Minor HAP Source	Area HAP Source
PM							
PM10							
PM2.5							
SO_2							
VOCs							
Individual HAP							Yes
Aggregate HAPs							Yes

The source is subject to 40 CFR Part 70 (the ROP Program) because the potential to emit carbon monoxide and nitrogen oxides exceeds 100 tons per year.

The stationary source is an area source of HAP emissions because the potential to emit of any single HAP is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year. HAPs are regulated by Section 112 of the federal Clean Air Act.

The stationary source is considered a "synthetic minor" source in regards to the Prevention of Significant Deterioration (PSD) regulations of the Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of nitrogen oxides to less than 250 tons per year. The source is limited to 224.9 tons per year of NOx emissions with restrictions on natural gas usage. The hours of operation for the emergency engine and emergency fire pump are also restricted. The Facility has requirements for continuous emissions monitoring for NOx with associated recordkeeping.

Emission units at the stationary source were subject to various state rules as well as federal regulations. These include minor New Source Review (NSR) permitting and state only air toxics rules. Emission unit EUPAPERMACHINE1 was subject to Rule 702 for Best Available Control Technology (BACT) of new sources of volatile organic compounds (VOCs).

Federal Requirements Included in the ROP

This section includes federal air regulations that were developed to implement and enforce standards of performance for new stationary sources and for National Emission Standards for Hazardous Air Pollutants (HAPs) that the source is subject to.

EUTURBINE1 at the stationary source is subject to the Standards of Performance for Stationary Combustion Turbines promulgated in 40 CFR Part 60, Subparts A and GG. EUTURBINE1 is a stationary gas turbine with a maximum heat input of 141.5 MMBTU/hr and was installed before 2004. The subpart requires restrictions on the sulfur content of the natural gas, monitoring the nitrogen and sulfur content in the fuel as described in the Custom Fuel Monitoring Plan in Appendix 3-A, and the submission of quarterly reports for excess emissions and monitoring systems performance.

EUDUCTBURNER1 at the stationary source is subject to the Standards of Performance for Steam Generating Units promulgated in 40 CFR Part 60, Subparts A and Db. EUDUCTBURNER1 is a steam generating unit that commenced construction after June 19, 1984 and has a heat input capacity from fuels combusted in the

steam generating unit of greater than 100 MMBTU/hr. The subpart contains an emission limit for NOx and requires quarterly excess emissions and monitoring system performance reports.

EUTURBINE2 and EUDUCTBURNER2 at the stationary source are subject to the Standards of Performance for Stationary Combustion Turbines promulgated in 40 CFR Part 60, Subparts A and KKKK. After the 2021 modification, EUTURBINE2 and its associated EUDUCTBURNER2 are now subject to this subpart as stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBTU/hr. The subpart contains emission limits for NOx and SO_2. The associated heat recovery steam generator (HRSG) and duct burner must comply with the NO_X emission limit. The subpart has restrictions on the SO_2 content of the natural gas and requires monitoring of the sulfur content of the fuel and the natural gas usage.

EUFIREPUMPEAST at the stationary source is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines promulgated in 40 CFR Part 60, Subparts A and IIII. EUFIREPUMPEAST is a certified, 305 hp, diesel, emergency fire pump engine that was installed in 2007. This subpart contains non-methane hydrocarbon (NMHC) + NO_X, CO, and PM emission limits. The subpart contains restrictions on the sulfur content of diesel fuel and hours of use for non-emergency purposes. The subpart has recordkeeping requirements for maintenance activities and for the duration and purpose of use according to the mandatory installed hours meter.

EUFIREPUMPWEST, EUFIREPUMPEAST, and EUBLACKSTART at the stationary source are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ. EUFIREPUMPEAST compliance with 40 CFR Part 63, Subpart ZZZZ is demonstrated through compliance with 40 CFR Part 60, Subpart IIII.

Acid Rain

The Acid Rain Program (ARP) was the first national cap and trade program in the country and it introduced a system of allowance trading that requires major emission reductions of SO_2 and NO_X, the primary precursors of acid rain, from the power sector. EGLE, AQD is the authority responsible for issuance of Phase II Acid Rain (Title IV) Permits in Michigan. The Acid Rain Permit and requirements are incorporated into the source's ROP.

No emission units at the stationary source are subject to the federal Acid Rain Program.

Cross-State Air Pollution Rule

This is a federal cap and trade program that addresses air pollution from power plants in upwind states that cross state lines and affects air quality in downwind states. This is done by regulating annual emissions of NO_X and SO_2 as well as NO_X emissions during the ozone season (May 1 through September 30).

No emission units at the stationary source are subject to the Cross-State Air Pollution Rule.

NOx SIP Call

The NOx SIP Call is a regulatory program initiated by the USEPA in 1998 to address the interstate transport of nitrogen oxides (NOx), which are precursors to ozone pollution. The program requires states to develop State Implementation Plans (SIPs) that set statewide NOx budgets for the ozone season, aiming to reduce NOx emissions and improve air quality.

EUTURBINE1 and EUTURBINE2 at the stationary source are currently subject to the requirements of the NOx SIP Call. The facility is subject to 40 CFR Part 97 for the monitoring and reporting requirements.

Periodic Monitoring

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 table identifies processes with periodic monitoring to show that control devices are properly operated and maintained in order to continuously meet an emission limit or standard.

Processes with Periodic Monitoring

Emission Unit ID	Description of Emission Unit and Control	Continuous Emission Monitoring	Parametric Monitoring
EUTURBINE1	Natural gas-fired combustion turbine with low NOx burners to control NO_X emissions	CEMS to measure NO_X emissions and flue gas oxygen concentration	Natural gas consumption monitor and steam production monitoring
EUTURBINE2	Natural gas-fired combustion turbine with low NOx burners to control NO_X emissions	CEMS to measure NO_X emissions and flue gas oxygen concentration	Natural gas consumption monitor and steam production monitoring
EUDUCTBURNER1	Natural gas-fired duct burner associated with a heat recovery steam generator (HRSG)	CEMS to measure NO_X emissions and flue gas oxygen concentration	Natural gas consumption monitor and steam production monitoring
EUDUCTBURNER2	Natural gas-fired duct burner associated with a heat recovery steam generator (HRSG)	CEMS to measure NO_X emissions and flue gas oxygen concentration	Natural gas consumption monitor and steam production monitoring
EUFIREPUMPEAST	Emergency fire pump with 305 hp diesel IC engine		Non-resettable hour meter
EUFIREPUMPWEST	Emergency fire pump with 290 hp diesel IC engine.		Non-resettable hour meter
EUBLACKSTART	Emergency generator with 433 hp (400 kw) diesel IC engine.		Non-resettable hour meter

Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64 is intended to provide a reasonable assurance of compliance with the emission limit(s) for emission units with an air pollution control device. Monitoring is

done to show that control devices are properly operated and maintained in order to continuously maintain the control efficiency to meet an emission limit or standard.

No emission units have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring (CAM) rule pursuant to 40 CFR Part 64 because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

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 Not Included in the Draft ROP

The following table identifies activities that need to be listed in an ROP application, however, are considered exempt processes that are not included in the ROP pursuant to Rule 212(4). These processes are not subject to any process-specific emission limits or standards.

Processes not in the ROP

Emission Unit ID	Description of Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EUSPACEHEATERS	Space heaters and water heaters, fired with natural gas	Rule 212(4)(c)	Rule 282(2)(b)(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. All comments received during the public comment period will be considered prior to a decision being made. The delegated decision maker for the AQD is Julie Brunner, ROP Central Unit Supervisor.

The final determination to approve, approve with modifications, or deny the proposed ROP 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.

Section 3: Frequently Used State and Federal Regulations

These tables list the most frequently used state and federal air regulations. Not all regulations listed may be applicable in each case. Please refer to the permit conditions to determine which regulations apply.

STATE AIR REGULATIONS

State Rule	Description of State Air Regulations
R 336.1201 (Rule 201)	Requires a Permit to Install for new or modified equipment that emits, or could emit, an air pollutant or contaminant. However, there are other rules that allow smaller emission sources to be installed without a permit (see Rule 279 through Rule 291 below). Rule 201 also states that the Department can add conditions to a permit to assure the air laws are met.
R 336.1205 (Rule 205)	Outlines the permit conditions that are required by the federal Prevention of Significant Deterioration (PSD) Regulations and/or Section 112 of the federal Clean Air Act. Also, the same types of conditions are added to a permit when a plant is limiting pollutant air emissions to legally avoid these federal requirements. (See the Federal Regulations table for more details on PSD.)
R 336.1210 (Rule 210) to R 336.1218 (Rule 218)	Rules for the ROP Program including applicability, applications, content, approval, consolidation, modification, renewal, and reopenings.
R 336.1224 (Rule 224)	New or modified equipment that emits toxic air contaminants must use the Best Available Control Technology for Toxics (T-BACT). The T-BACT review determines what control technology must be applied to the equipment. A T-BACT review considers energy needs, environmental and economic impacts, and other costs. T-BACT may include a change in the raw materials used, the design of the process, or add-on air pollution control equipment. This rule also includes a list of instances where other regulations apply and T-BACT is not required.
R 336.1225 (Rule 225) to R 336.1232 ((Rule 232)	The ambient air concentration of each toxic air contaminant emitted from the project must not exceed health-based screening levels. Initial Risk Screening Levels (IRSL) apply to cancer-causing effects of air contaminants and Initial Threshold Screening Levels (ITSL) apply to non-cancer effects of air contaminants. These screening levels, designed to protect public health and the environment, are developed by Air Quality Division toxicologists following methods in the rules and the United States Environmental Protection Agency (USEPA) risk assessment guidance.
R 336.1280 (Rule 280) to R 336.1291 (Rule 291)	These rules list equipment to processes that have very low emissions and do not need to get an Air Use permit. However, these sources must meet all requirements identified in the specific rule and other rules that apply.
R 336.1301 (Rule 301)	Limits how air emissions are allowed to look at the end of a stack. The color and intensity of the color of the emissions is called opacity.

STATE AIR REGULATIONS

State Rule	Description of State Air Regulations
R 336.1331 (Rule 331)	The particulate emission limits for certain sources are listed. These limits apply to both new and existing equipment.
R 336.1370 (Rule 370)	Material collected by air pollution control equipment, such as dust, must be disposed of in a manner, which does not cause more air emissions.
R 336.1401 (Rule 401) and R 336.1402 (Rule 402)	Limit the sulfur dioxide emissions from power plants and other fuel burning equipment.
R 336.1601 (Rule 601) to R 336.1651 (Rule 651)	Volatile organic compounds (VOCs) are a group of chemicals found in such things as paint solvents, degreasing materials, and gasoline. VOCs contribute to the formation of smog. The rules set VOC limits or work practice standards for existing equipment. The limits are based upon Reasonably Available Control Technology (RACT). RACT is required for all equipment listed in R 336.1601 through 336.1651.
R 336.1702 (Rule 702)	New equipment that emits VOCs is required to install the Best Available Control Technology (BACT). The technology is reviewed on a case-by-case basis. The VOC limits and/or work practice standards set for a particular piece of new equipment cannot be less restrictive than the Reasonably Available Control Technology (RACT) limits for existing equipment outlined in R 336.1601 through 336.1651.
R 336.1801 (Rule 801)	Nitrogen oxide emission limits for larger boilers and stationary internal combustion engines are listed.
R 336.1901 (Rule 901)	Prohibits the emission of an air contaminant in quantities that cause injurious effects to human health and welfare, or prevent the comfortable enjoyment of life and property. As an example, a violation may be cited if excessive amounts of odor emissions were found to be preventing residents from enjoying outdoor activities.
R 336.1902 (Rule 902)	Adopts standards by reference including provisions of 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS); 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP); and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories for federal air pollutant regulations from stationary sources.
R 336.1910 (Rule 910)	Air pollution control equipment must be installed, maintained, and operated properly.
R 336.1911 (Rule 911)	When requested by the AQD, a facility must develop and submit a malfunction abatement plan (MAP). This plan is to prevent, detect, and correct malfunctions and equipment failures.
R 336.1912 (Rule 912)	A facility is required to notify the AQD if a condition arises which causes emissions that exceed the allowable emission rate in a rule and/or permit.

STATE AIR REGULATIONS

State Rule	Description of State Air Regulations
R 336.2001 (Rule 1001) to R 336.2060 (Rule 1060)	Allow the AQD to request that a facility test its emissions and to approve the protocol used for these tests.
R 336.2501 (Rule 1501) to R 336.2514 (Rule 1514)	Regulates mercury emissions from any stationary coal-fired electric generating unit (EGU) serving a generator with a nameplate capacity of more than 25 megawatts producing electricity for sale. The program begins January 1, 2015 and contains provisions for existing and new EGUs. Mercury program eligibility provisions and prohibitions, demonstration plans, testing, monitoring, record keeping, and reporting are all part of the rule.
R 336.2801 (Rule 1801) to R 336.2804 (Rule 1804) Prevention of Significant Deterioration (PSD) of Air Quality	The PSD rules allow the installation and operation of large, new sources and the modification of existing large sources in areas that are meeting the National Ambient Air Quality Standards (NAAQS). The regulations define what is considered a large or significant source, or modification. In order to assure that the area will continue to meet the NAAQS, the permit applicant must demonstrate that it is installing the Best Available Control Technology (BACT). By law, BACT must consider the economic, environmental, and energy impacts of each installation on a case-by-case basis. As a result, BACT can be different for similar facilities. In a PTI application, the applicant identifies all air pollution control options available, the feasibility of these options, the effectiveness of each option, and why the option proposed represents BACT. As part of its evaluation, the AQD verifies the applicant's determination and reviews BACT determinations made for similar facilities in Michigan and throughout the nation.
R 336.2901 (Rule 1901) to R 336.2903 (Rule 1903) and R 336.2908 (Rule 1908) New Source Review for Major Sources Impacting Nonattainment Areas	Applies to new "major stationary sources" and "major modifications" as defined in R 336.2901. These rules contain the permitting requirements for sources located in nonattainment areas that have the potential to emit large amounts of air pollutants. To help the area meet the NAAQS, the applicant must install equipment that achieves the Lowest Achievable Emission Rate (LAER). LAER is the lowest emission rate required by a federal rule, state rule, or by a previously issued construction permit. The applicant must also provide emission offsets, which means the applicant must remove more pollutants from the air than the proposed equipment will emit. This can be done by reducing emissions at other existing facilities. As part of its evaluation, the AQD verifies that no other similar equipment throughout the nation is required to meet a lower emission rate and verifies that proposed emission offsets are permanent and enforceable.

FEDERAL AIR REGULATIONS

Citation	Description of Federal Air Regulations or Requirements
Section 109 of the Clean Air Act - National Ambient Air Quality Standards (NAAQS)	The USEPA has set maximum permissible levels for seven pollutants. These NAAQS are designed to protect the public health of everyone, including the most susceptible individuals, children, the elderly, and those with chronic respiratory ailments. The seven pollutants, called the criteria pollutants, are CO, lead, NOx, ozone, PM10, PM2.5, and SO_2. Portions of Michigan are currently in nonattainment for either ozone or SO_2. Furthermore, in Michigan, State Rules 336.1225 to 336.1232 are used to ensure the public health is protected from other compounds.
40 CFR 51, Appendix S - Emission Offset Interpretive Ruling	Appendix S applies during the interim period between nonattainment designation and USEPA approval of a SIP that satisfies nonattainment requirements specified in Part D of the federal Clean Air Act. Appendix S would apply in nonattainment areas where either no nonattainment permit rules apply or where the existing state rules are less stringent than Appendix S.
40 CFR 52.21 - Prevention of Significant Deterioration (PSD) Regulations	The PSD regulations allow the installation and operation of large, new sources and the modification of existing large sources in areas that are meeting the NAAQS. The regulations define what is considered a large or significant source, or modification. In order to assure that the area will continue to meet the NAAQS, the permit applicant must demonstrate that it is installing the Best Available Control Technology (BACT). By law, BACT must consider the economic, environmental, and energy impacts of each installation on a case-by-case basis. As a result, BACT can be different for similar facilities. In a PTI application, the applicant identifies all air pollution control options available, the feasibility of these options, the effectiveness of each option, and why the option proposed represents BACT. As part of its evaluation, the AQD verifies the applicant's determination and reviews BACT determinations made for similar facilities in Michigan and throughout the nation.
40 CFR 60 - Standards of Performance for New Stationary Sources (NSPS)	The USEPA has set national standards for specific sources of pollutants. These New Source Performance Standards (NSPS) apply to new or modified equipment in a particular industrial category. These NSPS set emission limits or work practice standards for over 60 categories of sources.
40 CFR 61 - National Emission Standards for Hazardous Air Pollutants (NESHAP)	The USEPA has set national standards for specific sources of pollutants. The National Emission Standards for Hazardous Air Pollutants (NESHAP) apply to new or modified equipment in a particular industrial category. These NESHAPs set emission limits or work practice standards for Asbestos, Benzene, Beryllium, Coke Oven Emissions, Inorganic Arsenic, Mercury, Radionuclides, and Vinyl Chloride (originally published listed HAPs) from sources.

FEDERAL AIR REGULATIONS

Citation	Description of Federal Air Regulations or Requirements
40 CFR 62 - Approval and Promulgation of State Plans for Designated Facilities and Pollutants	The USEPA has set forth the approval and disapproval of State plans for the control of pollutants and facilities under Section 111(d), and Section 129 as applicable, of the federal Clean Air Act, and the promulgation of Federal plans (e.g., 40 CFR 62 - Federal Plan Requirements for Municipal Solid Waste Landfills that commenced construction on or before July 17, 2014 and have not been modified or reconstructed Since July 17, 2014).
40 CFR 63 - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories	The USEPA has set national standards for specific sources of pollutants. The National Emission Standards for Hazardous Air Pollutants (NESHAP) (a.k.a. Maximum Achievable Control Technology (MACT) standards) apply to new or modified equipment in a particular industrial category. These NESHAPs set emission limits or work practice standards for over 100 categories of sources.
40 CFR 64 - Compliance Assurance Monitoring (CAM)	Compliance assurance monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the federal Clean Air Act for large emission units that rely on a pollution control device for compliance. Monitoring is conducted to determine that control devices are properly operated and maintained so that they continue to achieve a level of control that complies with applicable requirements. Stationary sources may be subject to CAM if they are required to obtain an ROP and have an emission unit for which all the following conditions are met: the emission unit uses a control device to achieve compliance with a federally enforceable emission limitation or standard for the applicable pollutant, the emission unit has potential pre-control emissions which are over 100 percent of the major source threshold amount (at a level considered to be major under the ROP Program) for the applicable pollutant, the emission limitation or standard does not meet a CAM exemption.