

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

Facility Identification Data

Name: TAYLOR BIOMASS GASIFICATION FACILITY
Address: 350 NEELYTOWN RD
MONTGOMERY, NY 12549

Owner/Firm

Name: TAYLOR HOLDINGS GROUP LTD
Address: 350 NEELYTOWN RD
MONTGOMERY, NY 12549, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:
Name: TRACEY L O'MALLEY
Address: NYSDEC - REGION 3
21 S PUTT CORNERS RD
NEW PALTZ, NY 12561
Phone:8452563054

Division of Air Resources:
Name: ALYSSA N ARKET
Address: NYSDEC - REGION 3
21 S Putt Corners Rd
New Paltz, NY 12561-1620
Phone:8452563058

Air Permitting Contact:
Name: JAMES W TAYLOR
Address: TAYLOR RECYCLING
350 NEELYTOWN RD
MONTGOMERY, NY 12549
Phone:8454574021

**Permit Description
Introduction**

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project

This Air Title V (ATV) permit is for both the existing Montgomery Wallboard Processing Plant as well as the proposed Taylor Biomass Gasification Facility.

The wallboard processing plant processes gypsum board material that is extracted from construction and

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

demolition (C&D) debris. The plant contains one emission unit (Emission Unit No. A00001) that consists of infeed, milling, conveyor sorting, outfeed conveyors, hammermill for crushing gypsum board, trommel screen and screw auger separation, and a baghouse dust collection system for air pollution control. The wallboard processing plant is operating under a beneficial use determination (BUD), No. 698-3-36 issued under the State's solid waste regulations. According to the BUD, the plant is authorized to accept a maximum of 400 tons per day of C&D debris, but at no time shall the plant accept more than 1,153 tons per week of C&D debris for a total of no more than 60,000 tons per year, and no more than 25,000 tons per year of gypsum wallboard received for recycling.

The baghouse controls particulate emissions from the process dust collection system and the conveyer system, which is enclosed and under negative pressure. The potential emissions are 1.75 tons per year. The wallboard processing plant was previously permitted by the NYSDEC as an air state facility under DECID: 3-3342-00238.

The gasification facility is a proposed organic waste recovery and biomass gasification renewable facility that includes three emission units. Emission Unit No. 000001 will include the use of a gasification reactor, combustion reactor, a 10 MW combustion turbine generator (CTG) with associated heat recovery steam generator (HRSG), and a startup heater. The processed biomass fuel delivered from a fuel feed system will be metered into the gasification reactor where it will be in direct contact with hot fluidized heat transfer media. The biomass will then be rapidly converted in the presence of steam into medium calorific value gas (Syngas) comprised mostly of hydrogen, carbon monoxide, and methane. The dry, clean product gas will be routed to the gas compressors for supplying the CTG. The exhaust gas from the HRSG will combine with the flue gas from the combustion reactor and heat recovery boiler and exist the single exhaust stack. The CTG emissions will be controlled with an Selective Catalytic Reduction (SCR) utilizing ammonia injection and an oxidation catalyst.

The product gas/syngas will be routed to an enclosed flare (Emission Unit No. 000002) during brief and infrequent periods of startup or malfunction of the Power Generation Pad. The flare will be operated at all times when syngas is vented to it. The syngas will pass through primary and secondary high efficiency cyclones for particulate removal prior to the flare.

Auxiliary steam will be provided by a natural gas-fired startup boiler (Emission Unit No. 000003). Emissions from the start up boiler will be vented through an independent stack that will be 45 feet above grade.

For the proposed gasification facility, the municipal waste combustor unit is subject to 40 CFR 60 Subpart Eb and 40 CFR 60 Subpart KKKK requirements.

Attainment Status

TAYLOR BIOMASS GASIFICATION FACILITY is located in the town of MONTGOMERY in the county of ORANGE.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
-----	-----
-----	-----
Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	ATTAINMENT

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	MODERATE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

 * Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.
 ** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

Facility Description:

Waste gypsum board recycling facility where waste gypsum board material from C&D debris is processed to separate the gypsum through a series of milling conveyor, sorting, and screening operations. The facility has also proposed an organic waste recovery and biomass gasification renewable energy project.

Permit Structure and Description of Operations

The Title V permit for TAYLOR BIOMASS GASIFICATION FACILITY is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:
 combustion - devices which burn fuel to generate heat, steam or power
 incinerator - devices which burn waste material for disposal
 control - emission control devices
 process - any device or contrivance which may emit air contaminants that is not included in the above categories.

TAYLOR BIOMASS GASIFICATION FACILITY is defined by the following emission unit(s):

Emission unit 000002 - Operation of a flare associated with the biogas gasification facility. Emissions exhaust through Emission Point EP00002.

Emission unit 000002 is associated with the following emission points (EP):
 00002
 Process: FLA is located at Building CTB - Flare combusting SYNGAS.

Emission unit 000003 - Operation of a startup boiler associated with the biogas gasification facility. Emissions exhaust through Emission Point EP00003.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

Emission unit 000003 is associated with the following emission points (EP):
00003

Process: 003 is located at Building CTB - Startup boiler firing natural gas.

Emission unit A00001 - Waste gypsum board recycling operation consisting of infeed, sorting, goutfeed conveyors, hammermill for crushing gypsum board, trommel screen and screw auger separation, and a baghouse dust collection system.

Emission unit A00001 is associated with the following emission points (EP):
000A1

Process: A01 is located at Building MAIN - Loading zone for moving precrushed gypsum board material onto process conveyor.

Process: A02 is located at Building MAIN - Waste gypsum board recycling process consisting of moving gypsum board material through a hammermill, a series of sorting conveyors, a two stage trommel screen, magnetic ferrous material separators, and screw augers for loading of finished product into hoppers and transport vehicles. A baghouse will control emissions from the process dust collection system, entire enclosed conveyor.

Emission unit 000004 - One 800 horsepower Diamond-Zee Model 1463 tub grinder used for the unadulterated waste wood (UWW) & landscape decorative mulch operations. This equipment fires diesel.

Process: TG1 Tub Grinder Engine for wood waste firing diesel fuel.

Emission unit 000001 - The Emission Unit consists of a Siemen's 10 MW Combustion Turbine Generator (CTG) with associated heat recovery steam generator (HRSG), a gasification reactor, a process combustor, and a startup heater for the biogas gasification facility. The exhaust from the CTG will be controlled by Selective Catalytic Reduction (SCR) and an Oxidation Catalyst (OC). The process combustor flue gas emissions will be controlled by a separate SCR/OC control system. Emissions from all three sources exhaust through Emission Point EP00001.

Emission unit 000001 is associated with the following emission points (EP):
00001

Process: 001 is located at Building CTB - Combustion Turbine firing medium calorific value gas (SYNGAS).

Process: 002 is located at Building CTB - Process Combuster combusting solid residue (char).

Process: 004 is located at Building CTB - Startup Heater firing natural gas.

Process: CLW is located at Building CTB - Combustion turbine and process combustor operating on clean wood only. Clean wood means untreated wood or untreated wood products including clean untreated lumber, tree stumps (whole or chipped), and tree limbs (whole or chipped). Clean wood does not include

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

yard waste or construction, renovation, and demolition wastes.

Title V/Major Source Status

TAYLOR BIOMASS GASIFICATION FACILITY is subject to Title V requirements. This determination is based on the following information:
This facility is major not because of any potential emissions being greater than major source thresholds but because the proposed facility will have a biomass gasification unit which is subject to 40 CFR 60 Subpart Eb.

Program Applicability

The following chart summarizes the applicability of TAYLOR BIOMASS GASIFICATION FACILITY with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	NO
SIP	YES

NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52.21, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status

Facility is in compliance with all requirements.

SIC Codes

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code	Description
3275	GYPSUM PRODUCTS
4911	ELECTRIC SERVICES
4953	REFUSE SYSTEMS

SCC Codes

SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

SCC Code	Description
1-01-006-02	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - NATURAL GAS Boilers < 100 MBtu/Hr except Tangential
2-02-007-01	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - PROCESS GAS
2-04-003-99	PROCESS GAS INDUSTRIAL TURBINE INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - TURBINE
3-01-023-30	OTHER NOT CLASSIFIED CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - SULFURIC ACID (CONTACT PROCESS)
3-05-015-02	CHEMICAL MANUFACTURING COMBUSTION CHAMBER MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Primary Grinder/Roller Mills
3-05-015-04	MINERAL PRODUCTS MINERAL PRODUCTS - GYPSUM MANUFACTURE Conveying
3-13-900-03	ELECTRICAL EQUIPMENT ELECTRICAL EQUIPMENT - PROCESS HEATERS Natural Gas
5-03-007-89	SOLID WASTE DISPOSAL - INDUSTRIAL SOLID WASTE DISPOSAL: INDUSTRIAL - LIQUID WASTE SLUDGE DIGESTER GAS FLARE

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
007664-41-7	AMMONIA		10.4		
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS		179415		

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

000630-08-0	CARBON MONOXIDE	17.8
007647-01-0	HYDROGEN CHLORIDE	2.6
007439-92-1	LEAD	0.0063
0NY210-00-0	OXIDES OF NITROGEN	63.1
0NY075-00-0	PARTICULATES	9.6
0NY075-00-5	PM-10	9.6
0NY075-02-5	PM-2.5	9.6
007446-09-5	SULFUR DIOXIDE	5.3
0NY100-00-0	TOTAL HAP	5.8
0NY998-00-0	VOC	4.2

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

**Division of Air Resources
Permit Review Report**

Permit ID: 3-3342-00105/00014
09/16/2024

Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

Division of Air Resources
Permit Review Report

Permit ID: 3-3342-00105/00014
09/16/2024

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

- (a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
 - (2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
 - (3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- (c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item_02

**Item B: General Provisions for State Enforceable Permit Terms and Condition - 6
NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description

FACILITY	ECL 19-0301	61	Powers and Duties of the Department with respect to air pollution control
0-00002/-/FLA	40CFR 60-A.18 (e)	58	Control Device Requirements (Flares)
FACILITY	40CFR 60-Dc.48c (g)	42	Reporting and

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

FACILITY	40CFR 60- Eb.52b (a) (1) (i)	43	Recordkeeping Requirements. Particulate emission limit after 12/19/2005
FACILITY	40CFR 60- Eb.52b (a) (4) (i)	44	Lead emission limit after 12/19/2005
FACILITY	40CFR 60-Eb.52b (b) (1)	45	Sulfur dioxide emission limit
0-00001/00001	40CFR 60-Eb.52b (b) (1)	55	Sulfur dioxide emission limit
0-00001/00001	40CFR 60-Eb.52b (b) (2)	56	Hydrogen chloride emission limit
0-00001/00001	40CFR 60-Eb.52b (d) (2)	57	Oxides of nitrogen emission limit
0-00001	40CFR 60-Eb.53b (b)	52	Operating Load Levels for Municipal Waste Combustors
FACILITY	40CFR 60-Eb.53b (c)	46	Maximum operating temperature
FACILITY	40CFR 60-Eb.54b (e)	47	Operating manual requirement
FACILITY	40CFR 60-Eb.54b (f)	48	Operator training requirement
FACILITY	40CFR 60-Eb.57b	49	Siting requirements.
0-00001	40CFR 60-Eb.58b (c) (8)	53	Opacity COM requirement
0-00001	40CFR 60-Eb.58b (k)	54	Fugitive ash testing requirement
A-00001	40CFR 60-000.672 (a)	60	Rock, gravel, sand, and clay processing and conveying - standard for particulate matter
FACILITY	40CFR 68	17	Chemical accident prevention provisions
FACILITY	40CFR 82-F	18	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	9, 19, 20	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	62	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	10	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	11	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	12	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	13	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 50, 51	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (4)	14	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (a) (8)	15	General Conditions -

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

FACILITY	6NYCRR 201-6.4 (c)	3	Right to Inspect
FACILITY	6NYCRR 201-6.4 (c) (2)	4	Recordkeeping and Reporting of Compliance Monitoring Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4 (c) (3) (ii)	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4 (d) (4)	34	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4 (f)	35	Operational Flexibility
FACILITY	6NYCRR 201-6.5 (a)	63	State Enforceable Requirements
FACILITY	6NYCRR 202-1.1	16, 36	Required emissions tests.
FACILITY	6NYCRR 202-2.4 (a) (3)	37	Emission statement methods and procedures
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.2	38	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212-1.6 (a)	39	Limiting of Opacity
FACILITY	6NYCRR 212-2.4 (b)	40	Control of Particulate from New and Modified Process Emission Sources
FACILITY	6NYCRR 215.2	8	Open Fires - Prohibitions
0-00004/-/TG1	6NYCRR 227-1.3 (a)	59	Particulate Emission Standards
FACILITY	6NYCRR 227-1.4 (a)	41	Opacity Standard

Applicability Discussion:

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-0301

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.4 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.4 (c)

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.4 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.4 (d) (4)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 211.2

This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68

This Part lists the regulated substances and their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act AmENDments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements

In addition to Title V, TAYLOR BIOMASS GASIFICATION FACILITY has been determined to be subject to the following regulations:

40 CFR 60.18 (e)

This regulation specifies the operating parameters and testing methods used to operate and monitor a flare that is being used as an air pollution control device (as required by a new source performance standard).

40 CFR 60.48c (g)

The owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each day.

40 CFR 60.52b (a) (1) (ii)

This citation states the standard for particulate matter for Subpart Eb.

40 CFR 60.52b (a) (4) (ii)

This citation states the lead emission standard for Subpart Eb.

40 CFR 60.52b (b) (1)

This citation states the sulfur dioxide emission standard for Subpart Eb.

40 CFR 60.52b (b) (2)

This citation states the hydrogen chloride emission standard for Subpart Eb.

40 CFR 60.52b (d) (2)

This citation states the nitrogen oxides emission standard for Subpart Eb.

40 CFR 60.53b (b)

This section sets forth a municipal waste combustor operating practice, specifically maximum load level.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

It requires that the operating range for the combustor must be no more than 110 percent of the maximum load level demonstrated during the most recent performance test demonstrating compliance with the applicable dioxin/furan limit.

40 CFR 60.53b (c)

This citation states the maximum operating temperature standard for Subpart Eb.

40 CFR 60.54b (e)

This citation states the requirements for a site-specific operating manual.

40 CFR 60.54b (f)

This citation states the requirements for review of the operating manual.

40 CFR 60.57b

This citation states the siting requirements for Subpart Eb.

40 CFR 60.58b (c) (8)

This citation states the requirement to install and operate a continuous opacity monitor.

40 CFR 60.58b (k)

This citation states the procedures for demonstrating compliance with the fugitive ash emission limit.

40 CFR 60.672 (a)

This regulation limits the opacity of emissions from a stack at a non-metallic processing facility to not greater than 7%. Further, the emissions of particulate matter from the stack may not exceed 0.022 grains per dry standard cubic feet.

6 NYCRR 201-6.4 (f)

This section describes the potential for certain operational changes to be made by the facility owner or operator without first obtaining a permit modification. Changes made pursuant to this provision must meet all of the criteria described in this section to qualify for consideration as operational flexibility. The Department reserves the right to require the facility owner or operator to obtain a permit modification prior to making any changes at the facility pursuant to this section.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

6 NYCRR 201-6.5 (a)

This subdivision states that the Department shall include state enforceable conditions in Title V permits. State enforceable conditions related to regulations developed pursuant to the Climate Leadership and Community Protection Act (CLCPA) and Article 75 of New York State Environmental Conservation Law may be included in future versions of this permit, as applicable.

6 NYCRR 202-2.4 (a) (3)

Once a facility is required to submit annual emission statements electronically, emission statements must be submitted to the department per the specified schedule, in this regulation beginning the reporting year that a Title V permit containing a condition mandating electronic submittal is issued.

6 NYCRR 212-1.6 (a)

This provisions requires that the facility owner or operator not cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water.

6 NYCRR 212-2.4 (b)

Particulate emissions from any process emission source, which received a B or C Environmental Rating, and for which an application was received by the department after July 1, 1973 are restricted to 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis.

6 NYCRR 227-1.3 (a)

This subdivision sets the particulate matter emission standards for subject stationary combustion installations.

6 NYCRR 227-1.4 (a)

This subdivisions sets the opacity standard for subject stationary combustion installations.

Compliance Certification

Summary of monitoring activities at TAYLOR BIOMASS GASIFICATION FACILITY:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring

FACILITY	42	record keeping/maintenance procedures
FACILITY	43	intermittent emission testing
FACILITY	44	intermittent emission testing
FACILITY	45	continuous emission monitoring (cem)

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

0-00001/00001	55	continuous emission monitoring (cem)
0-00001/00001	56	intermittent emission testing
0-00001/00001	57	continuous emission monitoring (cem)
0-00001	52	work practice involving specific operations
FACILITY	46	monitoring of process or control device parameters as surrogate
FACILITY	47	record keeping/maintenance procedures
FACILITY	48	record keeping/maintenance procedures
0-00001	53	continuous emission monitoring (cem)
0-00001	54	intermittent emission testing
A-00001	60	intermittent emission testing
FACILITY	19	record keeping/maintenance procedures
FACILITY	20	continuous emission monitoring (cem)
FACILITY	22	record keeping/maintenance procedures
FACILITY	23	monitoring of process or control device parameters as surrogate
FACILITY	24	monitoring of process or control device parameters as surrogate
FACILITY	25	monitoring of process or control device parameters as surrogate
FACILITY	26	record keeping/maintenance procedures
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	continuous emission monitoring (cem)
FACILITY	29	record keeping/maintenance procedures
FACILITY	30	record keeping/maintenance procedures
FACILITY	31	monitoring of process or control device parameters as surrogate
FACILITY	32	continuous emission monitoring (cem)
FACILITY	33	continuous emission monitoring (cem)
FACILITY	4	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	63	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
FACILITY	39	monitoring of process or control device parameters as surrogate
FACILITY	40	intermittent emission testing
0-00004/-/TG1	59	intermittent emission testing
FACILITY	41	monitoring of process or control device parameters as surrogate

Basis for Monitoring
40 CFR Part 60 Subpart A

Flares used to comply with provisions of this subpart shall be always operated when emissions may be vented to them.

40 CFR Part 60 Subpart Dc

The boiler is subject to the requirements of this subpart. Daily fuel records showing the amounts of each fuel combusted must be maintained.

40 CFR Part 60 Subpart Eb

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

On or after the date on which the initial performance test is completed, the facility shall not discharge into the atmosphere any gases that contain particulate matter in excess of 20 milligrams per dry standard cubic meter, corrected at 7% oxygen. Subsequent annual testing is required.

The Municipal Waste Combustor unit is subject to Subpart Eb because the unit is capable of combusting greater than 250 tons of Municipal Solid Waste (MSW) per day. Under this subpart, the emission limit for Lead from a large MSW combustor is 140 micrograms per dry standard cubic meter (corrected to 7% oxygen). Compliance shall be determined by annual performance testing. Initial performance testing and subsequent annual testing is required.

Following an initial performance test, the MSW combustor must maintain compliance with the emission limit for Sulfur Dioxide which shall be determined based on the 24-hour daily geometric average of the hourly emission concentration using continuous emission monitoring system outlet data. Facility shall install, calibrate, maintain, and operate a CEMS for measuring Sulfur Dioxide

The facility owner and/or operator shall not operate the fabric filter at a temperature (measured at the control device inlet) exceeding 17 degrees Celsius above the maximum particulate matter control device temperature. The maximum demonstrated particulate matter control device temperature means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit.

The owner or operator of a large MSW combustor shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of MSW combustor unit operation specified in 40 CFR 60.54b(e). A copy of the manual shall be kept on site and made available to the Department upon request.

The owner or operator of a large MSW combustor shall establish a training program to review the contents of the facility's operating manual with each person who has responsibilities affecting the operation of the facility as per 50 CFR 60.54b(f). A record of this training shall be kept onsite and made available to the Department upon request.

The owner/operator shall comply with the requirements of Section 60.57b of 40 CFR 60 Subpart Eb before the municipal waste combustor unit begins operation.

The facility is not permitted to operate at a load level greater than 110% of the maximum demonstrated municipal waste combustor unit load as defined in Section 60.51b.

Under this subpart, this facility shall install, calibrate, maintain, and operate a continuous opacity monitoring (COM) system on emission unit 000001 and ensure compliance with the 10 percent (6-min average) opacity limit.

The owner or operator of a large municipal waste combustor shall conduct a performance test for emissions of fugitive ash on an annual basis in accordance with the procedures described in Section 60.58b(k). Performance test reports shall be submitted to the Department no later than 30 days after the completion of the test. The upper permit limit for fugitive ash is 5 percent.

The facility owner and/or operator is required to operate the MSW combustor based on the Sulfur Dioxide emission limit of 30 parts per million by volume (ppmv). Compliance will be determined using a CEMS.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

The emission limit for Hydrogen Chloride from a large MSW combustor is 25 ppmv (corrected to 7% Oxygen). Compliance shall be determined by initial and subsequent annual performance testing.

Following the initial performance test, the facility must comply with the 150 ppmvd Oxides of Nitrogen emission limit. The emission limit shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentration using CEMS outlet data. The facility shall install, calibrate, maintain, and operate at CEMS for measuring NOx emissions.

Carbon Monoxide (CO) emission limits under 6 NYCRR Part 201-6 are more stringent than CO emission limits under Subpart Eb. Thus, the CO limits in Subpart Eb are not in the permit.

40 CFR Part 60 Subpart OOO

The particulate matter emissions from Emission Unit A-00001 are subject to the requirements of Table 2 in 40 CFR 60 Subpart OOO that commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, that are equipped with a capture system and control device must be limited to 0.022 grains per dscf.

40 CFR Part 60 Subpart KKKK

The combustion turbine and associated duct burners are subject to the emission limits and compliance requirements under 40 CFR Part 60, Subpart KKKK (Standards of Performance for Stationary Combustion Turbines). The emission limits determined through the LAER and BACT analyses are more stringent than those required under KKKK. Applicable monitoring, recordkeeping, and reporting requirements under KKKK still apply. By being subject to KKKK, the turbine is exempt from requirements in 40 CFR Part 60, Subpart GG.

Emission limits that facility is subject to but are less stringent and thus, not included in the permit:

NOx = 74 ppm, corrected to 15% oxygen

SO2 = 26 ng SO2/J or 0.060 lb.SO2/MMBtu

6 NYCRR Part 200.7

The flare is required to always be operating when Syngas may be vented to it. The control device must be operated and maintained in conformance with its design. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. The syngas will pass through primary and secondary high efficiency cyclones for particulate removal prior to the flare. The flare will be operated at a temperature high enough to adequately destroy all high molecular weight hydrocarbon compounds (tars). Upon selection of the flare, the facility is required to provide the Department with the manufacturer's specifications within 90 days of commencing operation and a minimum operating temperature condition requirement will be added to the permit.

Ammonia emissions from Emission Unit 0-00001 are limited to 10 ppmv, corrected to 15% Oxygen which has been determined by the manufacturer's specifications, control device guarantees, and fuel characteristics. Emissions shall be controlled using Selective Catalytic Reduction (SCR). The facility shall

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

install, calibrate, maintain, and operate a Continuous Emissions Monitor (CEM) to ensure continuous compliance. An initial performance test is also required.

6 NYCRR Part 202-1

Air emission tests are required for trace contaminants, including but not limited to heavy metals (arsenic, beryllium, total chromium, hexavalent chromium, copper, nickel, zinc), total polycyclic aromatic hydrocarbons (PAH), formaldehyde, benzo-a-pyrene, hexachlorobenzene, and polychlorinated biphenyls (PCBs). Testing will be a single occurrence within 180 days of the introduction of MSW to the gasifier.

6 NYCRR Part 201-6

The facility is required to conduct an initial performance test for Cadmium emissions within 180 days of the commencement of operation of the combustion turbine. If any of these contaminants are detected, the facility immediately needs to comply with the 40 CFR 60 Subpart Eb emission limits.

The facility must achieve a combustion index of 99.9 percent for the process combustor. The 99 percent should be based on a running eight-hour average of readings and a 99.95 percent based on a running seven-day average of reading. The facility shall maintain all records used to determine the combustion index as required for a period of five years. The combustion index is determined by:

$$CI = (CO_2 \times 100) / (CO_2 + CO)$$

Where:

CI = combustion index

CO = carbon monoxide in the exhaust gas, parts per million by volume (dry)

CO₂ = carbon dioxide in the exhaust gas, parts per million by volume (dry)

The facility shall not accept more than 25,000 tons per year of gypsum wallboard received for recycling. The Solid Waste Permit (DECID# 3-3342-00105-00009) contains the tracking and monitoring conditions on the number of materials that the facility can accept. The facility must always follow the Solid Waste Permit requirements.

The facility owner and/or operator is authorized to accept a maximum of 400 tons per day of Construction and Demolition (C&D) debris, but at no time shall the facility accept more than 1,153 tons per week of C&D debris for a total of no more than 60,000 tons per year.

The facility is required to conduct an initial performance test for Mercury emissions within 180 days of the commencement of operation of the combustion turbine. If any of these contaminants are detected, the facility immediately needs to comply with the 40 CFR 60 Subpart Eb emission limits.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

The facility is required to conduct an initial performance test for dioxin and furan emissions within 180 days of the commencement of operation of the combustion turbine. If any of these contaminants are detected, the facility immediately needs to comply with the 40 CFR 60 Subpart Eb emission limits.

The facility owner and/or operator is required to operate the MSW combustor based on the Oxides of Nitrogen (NO_x) emission limit of 25 parts per million by volume (ppmv). Compliance will be determined using a CEMS. The plant is also subject to the NO_x limit of 150 ppm, corrected to 7% oxygen (24-hour daily arithmetic average) under Subpart Eb but the permit limit under 201-6 is more stringent.

For the fabric filters, the facility owner and/or operator will monitor the following:

- (i) Hourly average pressure drop across each module and also across the inlet and outlet of the entire device in inches of water;
- (ii) Number of compartments in use, hourly;
- (iii) Hourly average temperature at both inlet and outlet of the device in degrees F; and
- (iv) Frequency and duration of maintenance or cleaning periods when the fabric filter is not fully operational.

Upon selection of a baghouse, the facility is required to provide the Department with the manufacturer's specifications within 60 days of commencing operation and specific limits will be added into the permit.

The processed fuel will consist of the organic component of incoming materials plus selected plastics. The facility shall conduct biomass feedstock sampling according to the approved plan. Sampling will occur just prior to the gasification tower at the exit of the storage silos. Records for all parameters evaluated shall be maintained by the facility and reported to the Department monthly. The facility shall identify any non-biomass content found, evaluate possible causes and document any corrective measures taken. Sampling plan to be followed from first time MSW is included in feedstock and will cease two calendar months after the date of the initial performance test is performed.

The facility owner and/or operator shall maintain records to verify the concentration of ammonia stored onsite is less than 19% concentration. Vendor certification must be provided per delivery to verify concentration.

The process combustor is limited to 25 ppmv (corrected to 7% oxygen) of Carbon Monoxide emissions using an averaging method of 4-hour blocks. The facility owner and/or operator will ensure compliance with this emission limit by using a CO CEMS. The concentration will be measured after the catalyst but prior to confluence of the exhaust streams in the common stack.

The combustion turbine is limited to 5 ppmv (corrected to 7% oxygen) of Carbon Monoxide emissions. The facility owner and/or operator will ensure compliance with this emission limit by using a CO CEMS. The concentration will be measured after the catalyst but prior to confluence of the exhaust streams in the common stack.

At least 60 days prior to the commencement of construction of the biomass gasification project, the facility owner or operator shall submit an implementation schedule for the mitigation measures detailed in the final CLCPA analysis dated June 12, 2024. In addition, the facility owner or operator shall submit a fully executed implementation agreement with the Village of Maybrook describing at least six solar powered electric vehicle (EV) charging stations to be installed within the Village of Maybrook. The agreement shall describe the location of each charging station and the anticipated installation date.

**Division of Air Resources
Permit Review Report**

**Permit ID: 3-3342-00105/00014
09/16/2024**

6 NYCRR Part 212

The facility shall not discharge any emissions into the atmosphere 20% or greater during any six consecutive minute period from any process emission source or emission point as per Part 212-1.6(a).

The wallboard recycling portion of the facility is prohibited from causing or allowing emissions of particulate that exceed 0.050 grains per cubic feet of exhaust gas, expressed at standard conditions on a dry gas basis from any process emission source as per Part 212-2.4(b). Emissions testing is required on Unit A-00001 once every five years and must follow EPA Method 5.

6 NYCRR 227

The facility is subject to the 20 percent opacity (based on a six-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. The owner or operator will conduct a Method 9 test annually. A report of the results of the test will be submitted to the Department within 30 days of the completion of the Method 9 test.

Process TG1, associated in Emission Unit 0-00004, is subject to the particulate emission limit of 0.1 lbs/MMBtu. The facility will show compliance with this emission limit by stack testing once every five years.

Climate Leadership and Community Protection Act (CLCPA)

Taylor Biomass Gasification Facility provided a CLCPA analysis describing the Greenhouse Gas (GHG) emissions from the project. These calculations considered both upstream and direct emissions. As mentioned above, the facility is required to submit a implementation schedule for the mitigation measures detailed in the final CLCPA analysis dated June 12, 2024 at least 60 days prior to the commencement of construction of the gasification project.

FACILITY CEMS

SO₂, NO_x, Ammonia, Mercury