

Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

Facility Identification Data

Name: Albany County Water Purification District - NORTH PLANT

Address: 1 CANAL RD S OFF JONES RD

MENANDS, NY 12204

Owner/Firm

Name: Albany County Water Purification District

Address: 112 State St Basement Albany, NY 12207-4187, USA Owner Classification: Municipal

Permit Contacts

Division of Environmental Permits: Name: ANGELIKA R STEWART Address: NYSDEC - REGION 4 1130 N WESTCOTT RD SCHENECTADY, NY 12306

Phone:5183572069

Division of Air Resources: Name: MARK LANZAFAME

Address: NYSDEC - HEADQUARTERS

625 BROADWAY

ALBANY, NY 12233-3254

Phone:5184028403

Air Permitting Contact: Name: TYLER MASICK

Address: 112 State St., basement

Albany, NY 12207-0418 Phone:5184471611

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 project consists of the renewal of the facility's Title V permit. This renewal includes the removal of the facility's emergency engines from a demand response program. Accordingly, they are now considered to be exempt activities per 6 NYCRR 201-3.2(c)(6). In addition, this renewal incorporates a minor modification to update the pressure drop limit for the unit 2 scrubber following the facility's most recent



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

performance test.

Attainment Status

Albany County Water Purification District - NORTH PLANT is located in the town of COLONIE in the county of ALBANY.

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

Facility Description:

Albany County Water Purification District (ACWPD) operates a wastewater treatment facility (North Plant) that is designed for an average flow of 35 million gallons per day (MGD). Primary components of the wastewater treatment process consist of preliminary treatment (grit screens), primary clarifiers, aeration tanks, final clarifier, sludge holding tanks, and chlorination tanks. Sludge removed during the wastewater treatment process is thickened using dissolved air floatation units, chemically conditioned for odor control and coagulation/flocculation, and then dewatered using a belt press.

The cake from the belt press is incinerated in one of two multiple hearth incinerators, each of which vents to a VenturiPakTM scrubber system, with only one incinerator in operation at any given time. Incinerator ash is managed in two on-site lagoons, where the ash is allowed to dry prior to being sent off site for use (under a Beneficial Use Determination) or disposal.

The North Plant includes two 1214 horsepower Caterpillar C27 diesel-fired emergency engines. These engines are exempt from permitting as described at 6 NYCRR 201-3.2(c)(6). The facility must comply with the applicable portions of 40 CFR 60 Subpart IIII.

Diesel fuel for the generator engines is stored in an 8,000-gallon horizontal above ground storage tank that is exempt from permitting in accordance with 201-3.2(c)(26). A 60 kW natural gas-fired emergency generator also is subject to the RICE MACT, but is not used in a demand response program and is exempt from permitting in accordance with 201-3.2(c)(3)(ii).

A gasoline dispensing facility, which is exempt from permitting in accordance with 201-3.2(c)(16), is used to fuel ACWPD vehicles and equipment with gasoline and diesel fuel, which are stored in vertical tanks. The diesel tank is exempt from permitting in accordance with 201-3.2(c)(21).

^{*} 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.



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

Permit Structure and Description of Operations

The Title V permit for Albany County Water Purification District - NORTH PLANT 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.

Albany County Water Purification District - NORTH PLANT is defined by the following emission unit(s):

Emission unit 1SSINP - This emission unit consists of two ten-hearth furnaces (MHF01 and MHF02) that incinerate sewage sludge generated from the treatment of municipal wastewater received at the Albany County North Plant. Only one furnace (either MHF01 or MHF02) operates at any given time. Each furnace is vented to a VenturiPak crubber system consisting of a quench stage, condenser stage, venturi, and high-efficiency mist eliminator. The multiple hearth furnaces are subject to 40 CFR Part 60, Subpart MMMM; 40 CFR Part 61, Subparts C and E; and 40 CFR Part 503, Subparts A and E.

Emission unit 1SSINP is associated with the following emission points (EP): 00001

Process: INC is located at Building SOLIDS - Incineration of sewage sludge in multiple hearth furnaces. Only one unit (either MHF01 or MHF02) is operated at any given time.

Title V/Major Source Status

Albany County Water Purification District - NORTH PLANT is subject to Title V requirements. This determination is based on the following information:

This facility is not a major source of air contaminants. The facility is requried to obtain a Title V permit because it operates two multiple hearth sewage sludge incineration units subject to 40 CFR 60 Subpart MMMM.

Program Applicability

The following chart summarizes the applicability of Albany County Water Purification District - NORTH PLANT with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	YES
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, 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.

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.

NEW YORK STATE Environmental Conservation

Division of Air Resources Permit Review Report

Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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

4952 SEWERAGE SYSTEMS
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.

SCC Code Description

5-01-005-15 SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - OTHER

INCINERATION

Sludge: Multiple Hearth

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



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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
001746-01-6	2,3,7,8-	0.00174	·	•	•
	TETRACHLORODI				
	BENZO-P-				
	DIOXIN				
007440-41-7	BERYLLIUM	0.1192			
007440-43-9	CADMIUM	33.2			
000124-38-9	CARBON		664		
	DIOXIDE				
0NY750-00-0	CARBON		670		
	DIOXIDE				
	EQUIVALENTS				
000630-08-0	CARBON		153		
	MONOXIDE				
007647-01-0	HYDROGEN	600			
	CHLORIDE				
007439-92-1	LEAD	34.2			
007439-97-6	MERCURY	23			
000074-82-8	METHANE	400			
0NY210-00-0	OXIDES OF		36.6		
	NITROGEN				
0NY075-00-0	PARTICULATES		14.2		
0NY075-02-5	PM 2.5		14.2		
0NY075-00-5	PM-10		14.2		
007446-09-5	SULFUR		17.8		
	DIOXIDE				
0NY100-00-0	TOTAL HAP	1000			
0NY998-00-0	VOC		16.7		

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)



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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.

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



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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 2 01-6.7 and Part 621.
- 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



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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.
- (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



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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 Regulation Facility/EU/EP/Process/ES		Condition	Short Description	
 FACILITY	ECL 19-0301	68	Powers and Duties of the Department with respect to air pollution control	
FACILITY FACILITY	40CFR 60-A 40CFR 60-A.13(i)(2)	26 27	General provisions General Provisions - Monitoring Requirements	
FACILITY	40CFR 60-IIII	28	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	
FACILITY	40CFR 60-MMMM.5130	29	Trained Operators	
FACILITY	40CFR 60-MMMM.5135	30	Schedule for Operator Training	
1-SSINP	40CFR 60-MMMM.5155	37	Procedures When Qualified Operators are Temporarily not Accessible	
1-SSINP	40CFR 60-MMMM.5165	38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48	Emission Limits, Emission Standards and Operating Limits	
1-SSINP	40CFR 60-MMMM.5170(f)		Operating Limits and Requirements - Sludge Moisture	
1-SSINP	40CFR 60-MMMM.5200	51	Site-specific	
1-SSINP	40CFR 60-MMMM.5205	52	monitoring plan Demonstration of Continuous Compliance with Emission Limits and Standards	
1-SSINP	40CFR 60-	53	Performance Testing	



Permit ID: 4-0126-00138/00012 Renewal Number: 1 12/22/2020

1-SSINP/-/INC/MHF01	MMMM.5205(a)(3 40CFR 60-MMMM.5210	60	Frequency Demonstration of Continuous Compliance
1-SSINP/-/INC/MHF02	40CFR 60-MMMM.5210	61	With Operating Limits Demonstration of Continuous Compliance With Operating Limits
1-SSINP/-/INC/VSCR1	40CFR 60-MMMM.5210	62, 63, 64	Demonstration of Continuous Compliance With Operating Limits
1-SSINP/-/INC/VSCR2	40CFR 60-MMMM.5210	65, 66, 67	Demonstration of Continuous Compliance With Operating Limits
1-SSINP	40CFR 60-MMMM.5215	54	Air Polution Control Device Inspection and Repairs
1-SSINP	40CFR 60- MMMM.5225(a)(1	55	Monitoring and Calibration Requirements for Operating Limits
1-SSINP FACILITY	40CFR 60-MMMM.5230 40CFR 60-MMMM.5235(c)	56, 57 31	Recordkeeping Sewage Slude Incineration - Annual Compliance Report
FACILITY	40CFR 60-MMMM.5235(d)	32	Sewage Sludge Incineration - Deviation Reports
1-SSINP	40CFR 61-C.32(a)	58	Beryllium: extraction plants, ceramic plants, foundries, incinerators, propellant plants, machine shops- emission standard
1-SSINP	40CFR 61-E.52(b)	59	Standard for Mercury: Mercury Ore Processing, chlorine gas production, and sludge incineration- emission standard
FACILITY	40CFR 63-CCCCCC.11115	33	General duties to minimize emissions
FACILITY	40CFR 63-CCCCCC.11116	34	Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline
FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	2	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	1	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	69	Unavoidable noncompliance and violations
FACILITY FACILITY	6NYCRR 201-1.7 6NYCRR 201-1.8	11 12	Recycling and Salvage Prohibition of reintroduction of collected



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

			contaminants to the
FACILITY	6NYCRR 201-3.2(a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 35, 36	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	3	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	4	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	5	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201- 6.4(c)(3)(ii	6	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	22	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	7	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	17	Off Permit Changes
FACILITY	6NYCRR 202-1.1	18	Required emissions tests.
FACILITY	6NYCRR 202-2.1	8	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	9	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.2	23	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212-1.6(a)	24	Limiting of Opacity
FACILITY	6NYCRR 215.2	10	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2(h)	25	Sulfur-in-Fuel Limitations

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



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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 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.



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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)

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 201-6.4 (f) (6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

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 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENDar year.

6 NYCRR 202-2.5



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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 there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

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, Albany County Water Purification District - NORTH PLANT has been determined to be subject to the following regulations:

40 CFR 60.13 (i) (2)

This section states that the Administrator may specify alternative monitoring requirements when the affected facility is operated infrequently.

40 CFR 60.5130

This section contains the operator training and qualification requirements for operators of sewage sludge incineration units.

40 CFR 60.5135

The operator training course must be completed by the later of the three dates specified in paragraphs (a) through (c) of this section.

40 CFR 60.5155



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

This section describes the procedures the facility owner or operator must follow if all of the qualified operators are not available.

40 CFR 60.5165

This section describes the various emission limits that the owner or operator of a sewage sludge incinerator is required to meet in order to demonstrate compliance with Subpart MMMM.

40 CFR 60.5170 (f)

This section requires the facility owner or operator to monitor certain characteristics of the sewage sludge fed to the incineration unit.

40 CFR 60.5200

This section requires the owner or operator of a Sewage Sludge Incineration (SSI) unit to develop and implement a site-specific monitoring plan for the SSI unit.

40 CFR 60.5205

This section describes the methods that the owner or operator of a sewage sludge incineration unit must use to demonstrate continuous compliance with the standards and limitations of 40 CFR 60 Subpart MMMM.

40 CFR 60.5205 (a) (3)

This section describes when the owner or operator of a sewage sludge incineration unit may conduct performance testing at a reduced frequency.

40 CFR 60.5210

This citation specifies the methods the facility must use to demonstrate continuous compliance with the operating limits.

40 CFR 60.5215

This section requires that the facility owner or operator to conduct an annual inspection of the air pollution control device(s) installed at the facility and make any necessary repairs.

40 CFR 60.5225 (a) (1)

This section describes the requirements for operating, maintaining, and calibrating the continuous monitoring systems required by 40 CFR 60 Subpart MMMM.



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

40 CFR 60.5230

This section describes the type and format of records that the owner or operator of a sewage sludge incinerator must keep in order to demonstrate compliance with 40 CFR 60 Subpart MMMM.

40 CFR 60.5235 (c)

This section requires the facility owner or operator to submit annual compliance reports to the Department.

40 CFR 60.5235 (d)

This section requires the facility owner or operator to submit semiannual deviation reports to the Department.

40 CFR 61.32 (a)

This citation contains the testing requirements for beryllium emissions.

40 CFR 61.52 (b)

This regulation sets the standard for mercury emissions from sludge incineration plants and/or sludge drying plants that process wastewater treatment plant sludges. The emission standard is less than 3,200 grams of mercury per day.

40 CFR 63.11115

This section describes the general duties the facility must use to minimize emissions from gasoline dispensing operations.

40 CFR 63.11116

This section describes the requirements for facilities with monthly throughput of gasoline from dispensing sources less than 10,000 gallons.

40 CFR Part 60, Subpart A

This regulation contains the General Provisions of 40 CFR 60. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements

40 CFR Part 60, Subpart IIII

This regulation defines performance standards for compression ignition stationary reciprocating internal combustion engines.



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

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 225-1.2 (h)

Sulfur-in-fuel limitation for the firing of distillate oil on or after July 1, 2016.

Compliance Certification

Summary of monitoring activities at Albany County Water Purification District - NORTH PLANT:

Location Facility/EU/EP/Process/ES	Cond N	No. Type of Monitoring
FACILITY	27	record keeping/maintenance procedures
FACILITY	29	record keeping/maintenance procedures
1-SSINP	37	record keeping/maintenance procedures
1-SSINP	38	intermittent emission testing
1-SSINP	39	intermittent emission testing
1-SSINP	40	intermittent emission testing
1-SSINP	41	intermittent emission testing
1-SSINP	42	monitoring of process or control device parameters as surrogate
1-SSINP	43	intermittent emission testing
1-SSINP	44	intermittent emission testing
1-SSINP	45	intermittent emission testing
1-SSINP	46	intermittent emission testing
1-SSINP	47	intermittent emission testing
1-SSINP	48	intermittent emission testing
1-SSINP	49	record keeping/maintenance procedures
1-SSINP	50	record keeping/maintenance procedures
1-SSINP	51	record keeping/maintenance procedures
1-SSINP	53	record keeping/maintenance procedures
1-SSINP/-/INC/MHF01	60	continuous emission monitoring (cem)
1-SSINP/-/INC/MHF02	61	continuous emission monitoring (cem)
1-SSINP/-/INC/VSCR1	62	continuous emission monitoring (cem)
1-SSINP/-/INC/VSCR1	63	continuous emission monitoring (cem)
1-SSINP/-/INC/VSCR1	64	continuous emission monitoring (cem)
1-SSINP/-/INC/VSCR2	65	continuous emission monitoring (cem)
1-SSINP/-/INC/VSCR2	66	continuous emission monitoring (cem)
1-SSINP/-/INC/VSCR2	67	continuous emission monitoring (cem)
1-SSINP	54	record keeping/maintenance procedures
1-SSINP	55	record keeping/maintenance procedures
1-SSINP	56	record keeping/maintenance procedures
1-SSINP	57	record keeping/maintenance procedures
FACILITY	31	record keeping/maintenance procedures
FACILITY	32	record keeping/maintenance procedures
1-SSINP	58	intermittent emission testing
1-SSINP	59	intermittent emission testing
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures



Permit ID: 4-0126-00138/00012

Renewal Number: 1 12/22/2020

FACILITY FACILITY	8 24	record keeping/maintenance procedures monitoring of process or control device parameters
FACILITY	25	as surrogate work practice involving specific operations

Basis for Monitoring

40 CFR 60 Subpart MMMM (Subpart MMMM) requires the owner or operator of a sewage sludge incinerator to establish various operating limits during the facility's initial performance test. Once established, the facility must continuously monitor each parameter to demonstrate compliance with the requirements of Subpart MMMM. Since the Albany County Sewer District – North Plant operates two separate incinerators, the facility has established a separate set of operating parameters for each unit as part of their annual performance test.

The Albany County Sewer District – North Plant was required to establish the following operating parameter limits:

- 1. Minimum combustion chamber temperature. This limit is important to ensure that the incinerator is achieving good combustion of the sewage sludge. A temperature below the minimum value is an indicator of poor combustion, which may lead to an increase in emissions.
- 2. Minimum pressure drop across the wet scrubber. A pressure drop below the minimum value is an indicator that exhaust gases are moving through the scrubber too quickly, potentially reducing the control efficiency of the unit.
- 3. Minimum wet scrubber water flow rate. A scrubber water flow rate below the minimum value is an indicator that the exhaust gases are not contacting the amount of water necessary to adequately control emissions, potentially reducing the control efficiency of the unit.
- 4. Minimum scrubber liquid exit pH. A scrubber exit pH below the minimum value is an indicator that the scrubber liquid is too acidic, which may indicate an increased amount of acid gases in the incinerator exhaust gas or a problem with the scrubber itself.

Each of these limits is monitored by a continuous parameter monitoring system, which must record a value once every 15 minutes. Four 15-minute readings are averaged into a 1-hour block average, and 12 1-hour block averages are averaged into a single 12-hour block average, which is used to demonstrate compliance. For pH, the facility must demonstrate compliance over a 3-hour block average instead of a 12-hour block average in order to account for the slow response time of pH to process changes.

Should any of the 15 minute readings or calculated averages fall below the specified limits, the facility must prepare a deviation report and submit it to the Department on a semiannual basis.