

# PERMIT Under the Environmental Conservation Law (ECL)

#### IDENTIFICATION INFORMATION

Permit Type: Air State Facility Permit ID: 6-3016-00048/00014

Effective Date: 06/22/2023 Expiration Date: 06/21/2033

Permit Issued To:ONEIDA COUNTY

800 PARK AVE

UTICA, NY 13501-2939

Contact: KARL E SCHRANTZ

Oneida County Water Quality & Water Pollution Control Plant

PO Box 442

Utica, NY 13503-0442

(315) 798-5656

Facility: ONEIDA CO WATER POLLUTION CONTROL PLANT

51 LELAND AVE UTICA, NY 13502

Contact: Dale Lockwood

51 Leland Ave PO Box 442

Utica, NY 13503-0442 (315) 798-5656

#### Description:

New Air State Facility (ASF) permit for Oneida County's municipal water pollution control plant (WPCP). This facility has operations including an anaerobic digester to reduce wastewater sludge and generate digester gas. The digester gas is used to fire the Capstone Turbine Corporation, C600S gas microturbine system which contains 5 microturbine bays. Individual microturbine capacity is 2.28 MMBtu/hr fuel flow (exempt per 6 NYCRR 201-3.2(c)(5)). A waste gas burner, or flare, is used to combust digester gas when it cannot be directed to the microturbines. Three (3) exempt natural gas-fired boilers provide heat to the anaerobic digester system. An additional six (6) exempt natural gas-fired boilers are operated for building and processes heat at the facility. The facility also operates three (3) exempt diesel fired emergency generators and wastewater treatment plant operations considered by NYSDEC to be exempt from permitting.

# **Division of Air Resources**



# Facility DEC ID: 6301600048

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:	TODD J PHILLIPS				
	NYSDEC - UTICA SUBOFFICE				
	207 GENESEE ST				
	UTICA, NY 13501				
Authorized Signature:		_ Date: _	/_	/	



#### **Notification of Other State Permittee Obligations**

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



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# **DEC GENERAL CONDITIONS**

#### **General Provisions**

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- 5 3 Applications for permit renewals, modifications and transfers
- 6 4 Permit modifications, suspensions or revocations by the Department Facility Level
- 6 5 Submission of application for permit modification or renewal-REGION 6 HEADQUARTERS



# DEC GENERAL CONDITIONS \*\*\*\* General Provisions \*\*\*\* GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

#### Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

#### Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

#### **Item 1.3:**

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

# Condition 2: Relationship of this Permit to Other Department Orders and Determinations Applicable State Requirement: ECL 3-0301 (2) (m)

#### Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

# Condition 3: Applications for permit renewals, modifications and transfers Applicable State Requirement: 6 NYCRR 621.11

#### Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

#### Item3.2:

The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

# **Item 3.3**

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

#### **Division of Air Resources**



Facility DEC ID: 6301600048

# Condition 4: Permit modifications, suspensions or revocations by the Department Applicable State Requirement: 6 NYCRR 621.13

#### Item 4.1:

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

\*\*\*\* Facility Level \*\*\*\*

Condition 5: Submission of application for permit modification or renewal-REGION 6
HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

#### Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator Region 6 Headquarters Division of Environmental Permits State Office Building, 317 Washington Street Watertown, NY 13601-3787 (315) 785-2245



# Permit Under the Environmental Conservation Law (ECL)

# ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

# IDENTIFICATION INFORMATION

Permit Issued To:ONEIDA COUNTY 800 PARK AVE UTICA, NY 13501-2939

Facility: ONEIDA CO WATER POLLUTION CONTROL PLANT

51 LELAND AVE UTICA, NY 13502

Authorized Activity By Standard Industrial Classification Code: 4952 - SEWERAGE SYSTEMS

Permit Effective Date: 06/22/2023 Permit Expiration Date: 06/21/2033



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NOTE: \* preceding the condition number indicates capping.



#### FEDERALLY ENFORCEABLE CONDITIONS

FINAL \*\*\*\* Facility Level \*\*\*\*

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

#### Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

#### Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

#### Item C: Maintenance of Equipment - 6 NYCRR 200.7

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,



required to operate such device effectively.

#### **Item D:** Unpermitted Emission Sources - 6 NYCRR 201-1.2

- (a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.
- (b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

### Item E: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

# Item F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

# Item G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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.

# Item H: Proof of Eligibility for Sources Defined as Trivial



#### Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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.

# Item I: Required Emission Tests - 6 NYCRR 202-1.1

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

#### Item J: Open Fires Prohibitions - 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.

#### 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)



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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.

# FEDERAL APPLICABLE REQUIREMENTS The following conditions are federally enforceable.

**Condition 1: Facility Permissible Emissions** 

Effective between the dates of 06/22/2023 and 06/21/2033

#### Applicable Federal Requirement: 6 NYCRR Subpart 201-7

#### Item 1.1:

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 0NY998-00-0 PTE: 99,800 pounds per year

Name: VOC

**Condition 2:** Capping Monitoring Condition

Effective between the dates of 06/22/2023 and 06/21/2033

#### Applicable Federal Requirement: 6 NYCRR Subpart 201-7

#### Item 2.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 201-6

#### Item 2.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

#### Item 2.3:

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.

#### Item 2.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

#### Item 2.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

#### Item 2.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

#### Item 2.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

Plant-wide VOC emissions are limited to 49.9 tons per year. To demonstrate compliance with this requirement, VOC emissions from each emission source operated on site shall be tracked monthly and on a twelve (12) month rolling total basis. VOC emissions shall be determined by summing the emissions calculated for the sources as listed below. Emissions will be calculated using EPA AP-42 or manufacturer provided emission factors (EFs). Emissions from the wastewater treatment process shall be estimated using the April 2020 TOXCHEM modeling results.

Turbines (tons/yr) - Actual amount of digester gas through turbines \* digester gas heating value \* EF\_VOC;

Flare (tons/yr) - Actual amount of digester gas through flare \* digester gas heating value \* EF VOC;

Boilers (tons/yr) - Actual amount natural gas burned \* EF VOC;

Generators (tons/yr) - Hours of operation \* maximum power \* EF\_VOC;



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Above Ground Storage Tanks (ASTs) – VOC emissions estimated using emission estimation tools found in EPA AP-42; and

Wastewater treatment (WWT) - VOC emissions as predicted by TOXCHEM modeling.

The owner or operator shall maintain records of the monthly and twelve (12) month rolling total emissions, the calculations, and all other information used to determine compliance with this condition at the facility for a period of at least five years in a format acceptable to the Department.

The owner or operator shall provide a certification to the Department on an annual basis beginning one year after the granting of an emissions cap certifying that the facility has operated all emission units within the limits imposed by the emission cap.

Parameter Monitored: VOC

Upper Permit Limit: 49.9 tons per year Monitoring Frequency: MONTHLY

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2024.

Subsequent reports are due every 12 calendar month(s).

#### **Condition 3:** Notification

Effective between the dates of 06/22/2023 and 06/21/2033

### Applicable Federal Requirement: 6 NYCRR 202-1.2

#### Item 3.1:

A person who is required by the commissioner to submit a stack test report shall notify the commissioner, in writing, not less than 30 days prior to the test, of the time and date of the test. Such notification shall also include the acceptable procedures to be used to stack test including sampling and analytical procedures. Such person shall allow the commissioner, or his representative, free access to observe stack testing being conducted by such person.

# **Condition 4:** Acceptable procedures

Effective between the dates of 06/22/2023 and 06/21/2033

# Applicable Federal Requirement: 6 NYCRR 202-1.3 (a)

#### Item 4.1:

Emission testing, sampling and analytical determinations to ascertain compliance with this Subchapter shall be conducted in accordance with test methods acceptable to the commissioner. The Reference Methods contained in part 60, appendix A and part 61, appendix B of title 40 of



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the Code of Federal Regulations and all future technical revisions, additions or corrections made thereto shall be considered as acceptable test methods for those sources and contaminants for which they are expressly applicable, except where the commissioner has issued a specific method to be used instead of a Reference Method contained in these Federal regulations or where the commissioner determines that one or more alternate methods are also acceptable. The person who owns or operates an air contamination source shall submit the emission test report in triplicate, to the commissioner within 60 days after the completion of tests. In the event such source owner/operator can demonstrate to the commissioner such time is not sufficient, he may request in writing and be granted an extension. Where an opacity emission standard is applicable to the source tested, the emission test report shall include the opacity observation.

Condition 5: Visible Emissions Limited
Effective between the dates of 06/22/2023 and 06/21/2033

# **Applicable Federal Requirement: 6 NYCRR 211.2**

#### Item 5.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 6: Compliance Demonstration Effective between the dates of 06/22/2023 and 06/21/2033

Applicable Federal Requirement: 6 NYCRR 212-1.1 (a) (1)

#### Item 6.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

An evaluation of air toxic contaminants was conducted as part of the Air State Facility permit application. The evaluation focused on emissions from the candlestick flare. The emissions were estimated based on the September 2019 source testing of the digester gas prior to the flare with maximum sludge feed rates to the digesters. Projected emissions were determined to be below the Mass Emission Limits (MELs) for the HTAC contaminants and below 100 lb/yr for non-HTAC contaminants in the digester gas stream.

The facility owner or operator must reevaluate emissions of air toxics as part of any permit modification or renewal application.



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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 7: Compliance Demonstration

Effective between the dates of 06/22/2023 and 06/21/2033

# Applicable Federal Requirement: 6 NYCRR 212-1.6 (a)

#### Item 7.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 7.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No facility owner or operator shall 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.

Parameter Monitored: OPACITY Upper Permit Limit: 20 percent Reference Test Method: EPA RM 9

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

### **Condition 8:** Compliance Demonstration

Effective between the dates of 06/22/2023 and 06/21/2033

#### Applicable Federal Requirement: 6 NYCRR 225-1.2 (d)

#### Item 8.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners or operators of emission sources that fire distillate oil are limited to a 0.0015 percent sulfur content by weight of the fuel. Compliance with the sulfur-in-fuel limitation is based on fuel vendor receipts. All fuel vendor receipts must be maintained on site or at a Department approved alternative location for a minimum of five years.



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Note - Process sources and incinerators must comply with the above requirements on or after July 1, 2023.

Work Practice Type: PARAMETER OF PROCESS MATERIAL Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT Upper Permit Limit: 0.0015 percent by weight Monitoring Frequency: PER DELIVERY

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY

TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 9:** Applicability

Effective between the dates of 06/22/2023 and 06/21/2033

Applicable Federal Requirement: 40CFR 60, NSPS Subpart IIII

#### Item 9.1:

Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

Condition 10: Applicability

Effective between the dates of 06/22/2023 and 06/21/2033

Applicable Federal Requirement: 40CFR 63, Subpart ZZZZ

#### Item 10.1:

Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 subpart ZZZZ.

\*\*\*\* Emission Unit Level \*\*\*\*

**Condition 11: Compliance Demonstration** 

Effective between the dates of 06/22/2023 and 06/21/2033

Applicable Federal Requirement: 6 NYCRR 200.7

### Item 11.1:

The Compliance Demonstration activity will be performed for:

**Emission Unit: 1-DIGST** 

### Item 11.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

After a pressure relief event in the anaerobic digesters



that results in one or more of the pressure relief valves opening, the owner or operator of the facility shall inspect the relief valves. The following shall be inspected to ensure the valves automatically re-seat as designed and are being keep in a satisfactory state of maintenance and repair:

- 1. The weather hood/insulating jacket shall be removed and inspected for any tears.
- 2. The pallets shall be removed one at a time. Identify the pallets to ensure they are returned to the correct valve seat.
- 3. The pallet inserts shall be inspected for ripples, tears, or nicks, as well as seating surfaces for debris, abrasion or pitting. Pallet edges and guideposts should be free of burrs, corrosion or other obvious damage.
- 4. All components shall be cleaned, replacing any showing excess wear or damage.
- 5. Components shall be reassembled per manufacturer specification.

Valve inspections after pressure relief events are to be performed in addition to any regular maintenance and inspections recommended by the manufacturer.

Records of pressure relief events and relief valve inspections shall be maintained on site for a period of at least five years and made available to the Department upon request. Such records shall include the date and time of the pressure relief event, date and time of the valve inspection, name of the staff person performing the inspection, inspection results, and a description of any corrective actions taken.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 12: Compliance Demonstration

Effective between the dates of 06/22/2023 and 06/21/2033

Applicable Federal Requirement: 6 NYCRR 200.7

#### Item 12.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DIGST Emission Point: FLR01



#### Item 12.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The facility has one Varec Biogas 244W Series Waste Gas Burner and Ignition System rated at 25,580 scf/hr.

In order to ensure proper operation of the waste gas burner (flare) the owner or operator shall operate the flare in accordance with the following:

- 1. The flare shall be operated with a flame present (pilot light) at all times when digester gas is vented through it. The presence of a flare pilot light should be monitored using a thermocouple or other equivalent device to detect the presence of a flame.
- 2. If the flare is found to be operating outside manufacturer's specifications or without a flame present when digester gas is vented through it the owner or operator shall investigate, in a timely manner, the cause, make any necessary corrections, and verify the problem has been corrected. Observations and corrective actions taken shall be recorded.

Daily records of the flare operating parameters, investigations, and corrective actions taken are to be maintained on site for a period of at least five years and made available to the Department upon request.

Parameter Monitored: FLOW RATE

Lower Permit Limit: 0.01 cubic feet per minute

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 13: Maintain all process emission sources, including the associated air pollution control and monitoring equipment Effective between the dates of 06/22/2023 and 06/21/2033

Applicable Federal Requirement: 6 NYCRR 212-1.5 (g)

Item 13.1:

This Condition applies to Emission Unit: 1-DIGST Emission Point: FLR01

Item 13.2:



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At all times, the facility owner or operator must operate and maintain all process emission sources, including the associated air pollution control and monitoring equipment, in a manner consistent with safety, good air pollution control practices, good engineering practices and manufacturers' recommendations for minimizing emissions.

# Condition 14: Compliance Demonstration Effective between the dates of 06/22/2023 and 06/21/2033

### Applicable Federal Requirement: 6 NYCRR 212-1.7 (a)

#### Item 14.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DIGST Emission Point: FLR01

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

#### Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Upon request by the Department, the facility shall submit a test protocol for a digester gas analysis and conduct the digester gas analysis test within 90 days of receiving written approval of the test protocol. The protocol shall include procedures to evaluate a target list of compounds as specified by the Department.

The compliance test shall be conducted to evaluate emissions of the following pollutants: total volatile organic compounds (VOCs), hydrogen sulfide (H2S), hydrogen chloride (HCl), formaldehyde (H2CO) and siloxanes.

Source testing must be conducted while the primary and secondary digesters are on-line and operating at the maximum achievable digester gas production at the time of testing.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION



# STATE ONLY ENFORCEABLE CONDITIONS \*\*\*\* Facility Level \*\*\*\*

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

#### Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR 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 demonstrate, 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 facility was being properly operated and maintained;
- (3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the 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 any 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 malfunction provision contained in any applicable requirement.

# Item B: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance



with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

# Item C: 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.

# STATE ONLY APPLICABLE REQUIREMENTS The following conditions are state only enforceable.

Condition 15: Contaminant List

Effective between the dates of 06/22/2023 and 06/21/2033

Applicable State Requirement: ECL 19-0301

#### Item 15.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 0NY998-00-0

Name: VOC

Condition 16: Malfunctions and Start-up/Shutdown Activities
Effective between the dates of 06/22/2023 and 06/21/2033

Applicable State Requirement: 6 NYCRR 201-1.4



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#### Item 16.1:

- (a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.
- (b) The facility owner or operator shall compile and maintain records of all equipment maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.
- (c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, the air contaminants emitted, and the resulting emission rates and/or opacity.
- (d) The department may also require the facility owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.
- (e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 17: Emission Unit Definition

Effective between the dates of 06/22/2023 and 06/21/2033

# Applicable State Requirement: 6 NYCRR Subpart 201-5

# Item 17.1:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: 1-DIGST Emission Unit Description:

Digester gas generated by the anaerobic digester system is treated and then combusted in the C600S microturbine system. Treatment includes the removal of particulates,



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moisture, hydrogen sulfide, and siloxanes. The microturbines each have a capacity of 2.28 million Btu per hour (MMBtu/hr) making them exempt per 6 NYCRR 201-3.2(c)(5). Operation of a waste gas burner, or flare, is used for destruction of digester gas when it cannot be directed to the gas microturbines. The digester gas is not treated before being combusted in the flare. Equipment within this Emission Unit includes:

The anaerobic digester system (2 primary and 1 secondary digesters) which exhausts through the flare (Emission Point FLR01) when not directed to the C600S microturbine system. Flare capacity 25,580 scf/hr.

The Capstone Turbine Corporation, C600S gas microturbine system which contains 5 microturbine bays. Individual microturbine capacity is 2.28 MMBtu/hr fuel flow (exempt per 6 NYCRR 201-3.2(c)(5)).

Three natural gas boilers (4.265 MMBtu/hr) to support the digester (exempt per 6 NYCRR 201-3.2(c)(1)(i)).

Building(s): AUXSTORAGE DIGESTER

Condition 18: Renewal deadlines for state facility permits
Effective between the dates of 06/22/2023 and 06/21/2033

Applicable State Requirement: 6 NYCRR 201-5.2 (c)

#### Item 18.1:

The owner or operator of a facility having an issued state facility 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.

Condition 19: Compliance Demonstration

Effective between the dates of 06/22/2023 and 06/21/2033

Applicable State Requirement: 6 NYCRR 201-5.3 (c)

#### Item 19.1:

The Compliance Demonstration activity will be performed for the Facility.

### Item 19.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control



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Engineer (RAPCE) at the following address:

Division of Air Resources NYS Dept. of Environmental Conservation Region 6 State Office Building 317 Washington Ave. Watertown, NY 13601

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 20: Air pollution prohibited

Effective between the dates of 06/22/2023 and 06/21/2033

# **Applicable State Requirement: 6 NYCRR 211.1**

#### Item 20.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

# Condition 21: Compliance Demonstration Effective between the dates of 06/22/2023 and 06/21/2033

#### **Applicable State Requirement: 6 NYCRR 211.1**

#### Item 21.1:

The Compliance Demonstration activity will be performed for the Facility.

# Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The facility shall follow good engineering practice and take precautions to minimize odors.

The facility shall establish an Odor Response Plan to manage odor complaints related to facility air emissions. The plan shall ensure that complaints are adequately received and documented, and that appropriate response is taken by the facility. The plan shall incorporate the following:

1. A line of communication available for complaints;



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- 2. Investigation of possible causes of any complaints received;
- 3. Prompt action to abate any circumstance which is found to be the cause of the complaint;
- 4. A logbook fully documenting the complaint, the results of investigation, and any action taken; and
- 5. Reporting in a format acceptable to the Department.

The owner or operator of the permitted facility must maintain all required records on site for a period of at least five years and make them available to the Department upon request. A copy of the Odor Response Plan shall be maintained at the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

\*\*\*\* Emission Unit Level \*\*\*\*

# Condition 22: Emission Point Definition By Emission Unit Effective between the dates of 06/22/2023 and 06/21/2033

# **Applicable State Requirement: 6 NYCRR Subpart 201-5**

#### Item 22.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-DIGST

Emission Point: FLR01

Height (ft.): 15 Diameter (in.): 10 NYTMN (km.): 4771.994 NYTME (km.): 484.13

Emission Point: PRV01

Height (ft.): 72 Diameter (in.): 8 NYTMN (km.): 4771.891 NYTME (km.): 484.15

Emission Point: PRV02

Height (ft.): 72 Diameter (in.): 8 NYTMN (km.): 4771.891 NYTME (km.): 484.15

Emission Point: PRV03

Height (ft.): 72 Diameter (in.): 8



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NYTMN (km.): 4771.891 NYTME (km.): 484.15

Emission Point: PRV04

Height (ft.): 72 Diameter (in.): 8 NYTMN (km.): 4771.891 NYTME (km.): 484.15

Emission Point: PRV05

Height (ft.): 26 Diameter (in.): 8 NYTMN (km.): 4771.891 NYTME (km.): 484.15

Emission Point: PRV06

Height (ft.): 26 Diameter (in.): 8 NYTMN (km.): 4771.891 NYTME (km.): 484.15

# Condition 23: Process Definition By Emission Unit Effective between the dates of 06/22/2023 and 06/21/2033

### Applicable State Requirement: 6 NYCRR Subpart 201-5

#### Item 23.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-DIGST

Process: DIG Source Classification Code: 5-01-007-89

Process Description:

Anaerobic digestion system where sanitary sewage sludge from the wastewater treatment plant is processed in two primary digesters and one secondary digester. The digester gas is treated to remove particulates, moisture, hydrogen sulfide and siloxanes. The treated digester gas is then burned in gas microturbines (exempt per 201-3.2(c)(5)). Since the turbines are exempt, they are not specifically defined, and no emission point is listed.

Emission Source/Control: PD001 - Process Design Capacity: 53,500 gallons per day

Emission Source/Control: PD002 - Process Design Capacity: 53,500 gallons per day

Emission Source/Control: SD001 - Process Design Capacity: 107,000 gallons per day

#### Item 23.2:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-DIGST

Process: FLR Source Classification Code: 5-03-007-89

Process Description:

The candlestick flare is considered a control device and acts as a waste gas burner that combusts the digester gas from the anaerobic digester system when the digester gas



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cannot be directed to the gas microturbines.

Emission Source/Control: FLARE - Control

Control Type: FLARING

Emission Source/Control: PD001 - Process Design Capacity: 53,500 gallons per day

Emission Source/Control: PD002 - Process Design Capacity: 53,500 gallons per day

Emission Source/Control: SD001 - Process Design Capacity: 107,000 gallons per day



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