Facility DEC ID: 1282000079

### PERMIT Under the Environmental Conservation Law (ECL)

#### **IDENTIFICATION INFORMATION**

Permit Type: Air State Facility Permit ID: 1-2820-00079/00001

Mod 0 Effective Date: 04/12/2016 Expiration Date: 04/11/2026

Mod 1 Effective Date: 05/23/2016 Expiration Date: 04/11/2026

Permit Issued To:ADELPHI UNIVERSITY

FACILITIES MANAGEMENT DEPT

1 SOUTH AVE

GARDEN CITY, NY 11530

Contact: TIM BURTON

1 SOUTH AVE

GARDEN CITY, NY 11530

(516) 877-3385

Facility: ADELPHI UNIVERSITY

1 SOUTH AVE

GARDEN CITY, NY 11530

Contact: Terranext LLC

200 CENTENNIAL AVE STE 200

PISCATAWAY, NJ 08854

#### Description:

A minor modification is requested by Adelphi University to change the monitoring frequences of permit conditions to a "monthly" basis.

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: ROGER EVANS

NYSDEC - REGION 1 SUNY @ STONY BROOK

50 CIRCLE RD

STONY BROOK, NY 11790-3409

Authorized Signature: \_\_\_\_\_\_ Date: \_\_\_/ \_\_\_/



Facility DEC ID: 1282000079

#### **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.



Facility DEC ID: 1282000079

#### LIST OF CONDITIONS

#### **DEC GENERAL CONDITIONS**

#### **General Provisions**

Facility Inspection by the Department Relationship of this Permit to Other Department Orders and Determinations

> Applications for permit renewals, modifications and transfers Permit modifications, suspensions or revocations by the Department

### **Facility Level**

Submission of application for permit modification or renewal - REGION 1 HEADQUARTERS

Facility DEC ID: 1282000079

# 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 renewal application at least 180 days before expiration of permits for both 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.

# 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,

# New York State Department of Environmental Conservation Facility DEC ID: 1282000079

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 1 HEADQUARTERS

Applicable State Requirement: 6 NYCRR 621.6 (a)

#### Item 5.1:

Applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator Region 1 Headquarters Division of Environmental Permits Stony Brook University 50 Circle Road Stony Brook, NY 11790-3409 (631) 444-0365



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

#### Permit Under the Environmental Conservation Law (ECL)

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

### **PERMIT**

#### **IDENTIFICATION INFORMATION**

Permit Issued To:ADELPHI UNIVERSITY

FACILITIES MANAGEMENT DEPT

1 SOUTH AVE

GARDEN CITY, NY 11530

Facility: ADELPHI UNIVERSITY

1 SOUTH AVE

GARDEN CITY, NY 11530

Authorized Activity By Standard Industrial Classification Code:

8221 - COLLEGES AND UNIVERSITIES, NEC

Mod 0 Permit Effective Date: 04/12/2016 Permit Expiration Date: 04/11/2026

Mod 1 Permit Effective Date: 05/23/2016 Permit Expiration Date: 04/11/2026



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#### LIST OF CONDITIONS

### FEDERALLY ENFORCEABLE CONDITIONS

### **Facility Level**

- 1 6 NYCRR 200.1 (cq): Definition for Emergency Generators
- 2 6 NYCRR 201-3.2 (c): Exempt Activities Industrial: (c)(31)
- 3 6 NYCRR 201-7.1: Facility Permissible Emissions
- \*1-1 6 NYCRR 201-7.1: Capping Monitoring Condition
- 5 6 NYCRR 211.1: Air pollution prohibited
- 6 40CFR 60, NSPS Subpart IIII: Applicability
- 7 40CFR 60, NSPS Subpart JJJJ: Applicability
- 8 40CFR 63, Subpart ZZZZ: Engines at Area sources of HAP

#### **Emission Unit Level**

#### EU=U--0002

9 40CFR 60, NSPS Subpart JJJJ: Compliance Demonstration

# STATE ONLY ENFORCEABLE CONDITIONS Facility Level

- 10 ECL 19-0301: Contaminant List
- 11 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 12 6 NYCRR Subpart 201-5: Emission Unit Definition
- 13 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 14 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 15 6 NYCRR 211.2: Visible Emissions Limited

#### **Emission Unit Level**

- 16 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 17 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

#### EU=U--0002

- 1-2 6 NYCRR Subpart 201-5: Compliance Demonstration
- 19 6 NYCRR Subpart 201-5: Compliance Demonstration

#### EU=U--0003

- 1-3 6 NYCRR Subpart 201-5: Compliance Demonstration
- 22 6 NYCRR Subpart 201-5: Compliance Demonstration

NOTE: \* preceding the condition number indicates capping.



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# FEDERALLY ENFORCEABLE CONDITIONS \*\*\*\* 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,



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required to operate such device effectively.

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

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

#### 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



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#### 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)



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

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: Definition for Emergency Generators** 

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable Federal Requirement:6 NYCRR 200.1 (cq)

Item 1.1: Emergency power generating stationary internal combustion engine is defined as a stationary internal combustion engine that operates as a mechnical or electrical power source only when the usual supply of power is unavailable, and operates for no more than 500 hours per year. The 500 hours of annual operation for the engine includes operation during the emergency situations, routine maintenance and routine exercising (for example, test firing the engine for one hour a week to ensure reliability). A stationary internal combustion engine used for peak shaving generation is not an emergency power generating stationary internal combustion engine.

Condition 2: Exempt Activities - Industrial: (c)(31)

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable Federal Requirement:6 NYCRR 201-3.2 (c)

#### Item 2.1:

The following activity is exempt from permitting requirements at non-Title V facilities, but must be included in Title V facility permit applications: Surface coating operations which are specifically exempted from regulation under Part 228, with respect to emissions of volatile organic compounds which are not given an A rating.

**Condition 3:** Facility Permissible Emissions

Effective between the dates of 04/12/2016 and 04/11/2026

**Applicable Federal Requirement: 6 NYCRR 201-7.1** 

#### Item 3.1:

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

Air Pollution Control Permit Conditions
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Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

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

CAS No: 0NY210-00-0 (From Mod 1) PTE: 48,000 pounds

per year

Name: OXIDES OF NITROGEN

**Condition 1-1:** Capping Monitoring Condition

Effective between the dates of 05/23/2016 and 04/11/2026

Applicable Federal Requirement: 6 NYCRR 201-7.1

Replaces Condition(s) 4

#### Item 1-1.1:

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 1-1.2:

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

#### Item 1-1.3:

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 1-1.4:

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 1-1.5:

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 1-1.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-1.7:



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The facility NOx PTE will be capped at less than 24.00 tons per year for the co-generation system, stationary internal combustion engines enrolled in a demand response program and exempt boilers.

Parameter Monitored: OXIDES OF NITROGEN Upper Permit Limit: 24.00 tons per year Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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

Condition 5: Air pollution prohibited

Effective between the dates of 04/12/2016 and 04/11/2026

**Applicable Federal Requirement: 6 NYCRR 211.1** 

#### Item 5.1:

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 6: Applicability** 

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable Federal Requirement: 40CFR 60, NSPS Subpart IIII

#### Item 6.1:

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

Condition 7: Applicability

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable Federal Requirement: 40CFR 60, NSPS Subpart JJJJ



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#### Item 7.1:

Facilities that have stationary spark ignition internal combustion engines must comply with applicable portions of 40 CFR 60 subpart JJJJ.

Condition 8: Engines at Area sources of HAP

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable Federal Requirement: 40CFR 63, Subpart ZZZZ

#### Item 8.1:

Internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart IIII or Subpart JJJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.

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

**Condition 9: Compliance Demonstration** 

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable Federal Requirement: 40CFR 60, NSPS Subpart JJJJ

#### Item 9.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U--0002

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

#### Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Co- generation system-initial performance test to verify manufacturer's NOx guarantee of 0.52 grams per bhp-hr within 60 days of operation.

Manufacturer Name/Model Number: GE Jenbacher JMS612

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.52 grams per brake horsepower-hour

Reference Test Method: EPA Methods 3,3A,7E,20

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION** 

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Air Pollution Control Permit Conditions Mod 1/Active Page 9 FINAL



## New York State Department of Environmental Conservation Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

The initial report is due 1/30/2017. Subsequent reports are due every 12 calendar month(s).



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

# 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 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 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.



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

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 10:** Contaminant List

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable State Requirement: ECL 19-0301

#### Item 10.1:

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

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

Condition 11: Malfunctions and start-up/shutdown activities

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable State Requirement: 6 NYCRR 201-1.4

Item 11.1:



### New York State Department of Environmental Conservation Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

- (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 malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, 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 stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.
- (c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and 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. 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, identification of air contaminants, and an estimate of the emission rates.
- (d) The department may also require the 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 12:** Emission Unit Definition

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable State Requirement: 6 NYCRR Subpart 201-5

#### **Item 12.1(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for: Emission Unit: U--0001

**Emission Unit Description:** 

Seven (7) stationary internal combustion engines enrolled in a demand response program; two (2) Cummins 800 DGFAB generators each rated at 800 kW firing diesel fuel (G0001 and G0002), one (1) Caterpillar DM8168 generator rated at 300 kW firing diesel fuel (G0003), one (1) new Cummins DFEH generator rated at 400 kW firing diesel fuel (G0004) to be installed in the fall of 2015, one (1) Generac QT080



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

generator rated at 80 kW firing natural gas (G0005), one (1) Generac SG60 generator rated at 60 kW firing natural gas (G0006), and one (1) Generac SG020 generator rated at 20 kW firing natural gas (G0007). G0001 is located outside at the ground level on the east side of the CRS building. G0002 is located outside at ground level on the east side of the HHE building. G0003 is located outside at ground level on the south side of the PAC building. G0004 will be installed in the mechanical room of the new Nexus building, which is next to the LVH building. G0005 is located on the east side of the WLH building almost in the middle of the campus. G0006 is located in the 4th floor mechanical room of the SCB building, which is located in the central area of the campus. G0007 is located on the northeast corner of the LVH building.

#### **Item 12.2(From Mod 1):**

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

Emission Unit: U--0002 Emission Unit Description:

One emission source, CG001, a co-generation system, driven by a GE Jenbacker stationary internal combustion engine, model JMS 612 F02.

#### **Item 12.3(From Mod 1):**

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

Emission Unit: U--0003

Emission Unit Description:

Exempt Sources: De Detrich GT530-31 Boiler Unit 1- rated 7.849 million Btu heat input per hour firing either

natural gas or #2 oil.

De Detrich GT530-31 Boiler Unit 2- rated 7.849 million Btu heat input per hour firing either natural gas or #2

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De Detrich GT530-31 Boiler Unit 3- rated 7.849 million Btu heat input per hour firing either natural gas or #2

De Detrich GT530-31 Boiler Unit 4- rated 7.849 million Btu heat input per hour firing either natural gas or #2 oil

Aerco Bench Mark Boiler #1- rated 2.0 million Btu heat input per hour firing natural gas

Aerco Bench Mark Boiler #2 - rated 2.0 million Btu heat input per hour firing natural gas

Aerco Bench Mark Boiler # 3- rated 2.0 million Btu heat input per hour firing natural gas

Condition 13: Renewal deadlines for state facility permits
Effective between the dates of 04/12/2016 and 04/11/2026

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



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

#### Item 13.1:

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 14: Compliance Demonstration** 

Effective between the dates of 04/12/2016 and 04/11/2026

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

#### Item 14.1:

The Compliance Demonstration activity will be performed for the Facility.

#### Item 14.2:

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 Engineer (RAPCE) at the following address:

Division of Air Resources NYS Dept. of Environmental Conservation Region 1 SUNY at Stony Brook Building 40 Stony Brook, NY 11790-2356

Reporting Requirements: ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. The initial report is due 1/30/2017. Subsequent reports are due every 12 calendar month(s).

**Condition 15: Visible Emissions Limited** 

Effective between the dates of 04/12/2016 and 04/11/2026

**Applicable State Requirement: 6 NYCRR 211.2** 

#### Item 15.1:

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.

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

**Condition 16: Emission Point Definition By Emission Unit** 

Effective between the dates of 04/12/2016 and 04/11/2026



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

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

#### **Item 16.1(From Mod 1):**

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

Emission Unit: U--0001

Emission Point: G0001

Height (ft.): 14 Diameter (in.): 12 NYTMN (km.): 4508.846 NYTME (km.): 612.856

Emission Point: G0002

Height (ft.): 8 Diameter (in.): 13

NYTMN (km.): 4508.659 NYTME (km.): 613.869

Emission Point: G0003

Height (ft.): 10 Diameter (in.): 8 NYTMN (km.): 4508.659 NYTME (km.): 613.869

Emission Point: G0004

Height (ft.): 28 Diameter (in.): 10 NYTMN (km.): 4508.659 NYTME (km.): 613.869

Emission Point: G0005

Height (ft.): 5 Diameter (in.): 5

NYTMN (km.): 4508.659 NYTME (km.): 613.869

Emission Point: G0006

Height (ft.): 7 Diameter (in.): 3

NYTMN (km.): 4508.659 NYTME (km.): 613.869

Emission Point: G0007

Height (ft.): 4 Diameter (in.): 3

NYTMN (km.): 4508.659 NYTME (km.): 613.869

#### **Item 16.2(From Mod 1):**

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

Emission Unit: U--0002

Emission Point: CG001

Height (ft.): 87 Diameter (in.): 27 NYTMN (km.): 4508.659 NYTME (km.): 613.869

**Condition 17:** Process Definition By Emission Unit

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable State Requirement: 6 NYCRR Subpart 201-5

#### **Item 17.1(From Mod 1):**

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

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Emission Unit: U--0001

Process: D01
Process Description:

Emission Sources G0001, G0002, G0003, and G0004 firing

low sulfur diesel.

G0001 is located at ground level outside the east wall of the CRS building; G0002 is located 6.5 feet below ground level outside the east wall of the HHE building; G0003 is located at ground level outside the south wall of the PAC building; G0004 will be located inside the mechanical room of the new Nexus building. Emission sources G0005, G0006, and G0007 firing natural gas.

Emission Source/Control: G0001 - Combustion

Design Capacity: 800 kilowatts

Emission Source/Control: G0002 - Combustion

Design Capacity: 800 kilowatts

Emission Source/Control: G0003 - Combustion

Design Capacity: 300 kilowatts

Emission Source/Control: G0004 - Combustion

Design Capacity: 400 kilowatts

#### **Item 17.2(From Mod 1):**

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

Emission Unit: U--0001

Process: NG1
Process Description:

Emission Sources G0005, G0006 and G0007 firing natural

gas.

G0005 is located next to the WLH building, G0006 is located in the 4th floor mechanical room of the SCB building, and G0007 is located next to the LVH

building.

Emission Source/Control: G0005 - Combustion

Design Capacity: 80 kilowatts

Emission Source/Control: G0006 - Combustion

Design Capacity: 60 kilowatts

Emission Source/Control: G0007 - Combustion

Design Capacity: 20 kilowatts

#### **Item 17.3(From Mod 1):**

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



Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079

Emission Unit: U--0002

Process: G02

Process Description:

A co-generation system, driven by a GE Jenbacker stationary internal combustion engine, model JMS 612 F02, that will produce about 2 megawatts [MW] electrically at maximum rating of 15.710 million Btu fuel heat input per hour firing natural gas and 2760 brake horsepower mechanical rating.

The associated emission rate guarantees are: 0.52 g/bhp-hr, NOx, 0.30 g/bhp-hr, CO, 0.2 g/bhp-hr, VOC, 0.006 g/bhp-hr, Formaldehyde, 0.09 g/bhp-hr, PM10, 3267 lbs/hr, CO2

The CO and the formaldehyde guarantees are provided with the use of a CO catalyst. The maximum admissible exhaust back pressure after the engine is 0.725 psi.

Emission Source/Control: CG001 - Combustion Design Capacity: 15.71 million Btu per hour

#### **Item 17.4(From Mod 1):**

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

Emission Unit: U--0003

Process: B03

Process Description: Exempt boilers

Emission Source/Control: EXEMP - Combustion

#### **Condition 1-2:** Compliance Demonstration

Effective between the dates of 05/23/2016 and 04/11/2026

Applicable State Requirement: 6 NYCRR Subpart 201-5

Replaces Condition(s) 20

#### Item 1-2.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U--0002

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

#### Item 1-2.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Co- generation system:

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Based upon the manufacturer's NOx emission guarantee of 0.52 grams NOx per bhp-hr maximum fuel consumption rating, the calculated NOx emission rate per SCF natural gas fired is 0.000175 (Table 2-3). With this emission factor and the monitoring of the fuel combustion, the annual NOx emission rate will be monitored and the facility will maintain operations below a 93% capacity factor.

Process Material: FUEL

Parameter Monitored: VOLUME

Upper Permit Limit: 148 million cubic feet

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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

**Condition 19: Compliance Demonstration** 

Effective between the dates of 04/12/2016 and 04/11/2026

Applicable State Requirement: 6 NYCRR Subpart 201-5

#### Item 19.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U--0002

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

#### Item 19.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The calculated annually NOx PTE associated with the new co-generation systems U0002 (CG001) will not exceed 12.9

tons.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 12.9 tons per year Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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

Condition 1-3: Compliance Demonstration Effective between the dates of 05/23/2016 and 04/11/2026

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

#### Replaces Condition(s) 21

#### Item 1-3.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U--0003

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

#### Item 1-3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

Exempt boilers:

Natural Gas fuel consumption will be monitored to determine the total heat input to the boilers for

calculations of a NOx emission rate.

Process Material: NATURAL GAS Parameter Monitored: VOLUME

Upper Permit Limit: 36.05 million cubic feet

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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

#### **Condition 22:** Compliance Demonstration

Effective between the dates of 04/12/2016 and 04/11/2026

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

#### Item 22.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U--0003

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

#### Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

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Exempt boilers:

Distillate #2- fuel oil consumption will be monitored to determine the total heat input to the boilers allowing for calculation of the NOx emission rate.

Process Material: NUMBER 2 OIL Parameter Monitored: VOLUME Upper Permit Limit: 251120 gallons Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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



# New York State Department of Environmental Conservation Permit ID: 1-2820-00079/00001 Facility DEC ID: 1282000079