

Facility DEC ID: 2620201787

PERMIT Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility 2-6202-01787/00002 Permit ID:

Mod 0 Effective Date: 07/03/2014 Expiration Date: 07/02/2024

Mod 1 Effective Date: 07/26/2017 Expiration Date: No expiration date.

Mod 2 Effective Date: 02/13/2019 Expiration Date: 07/02/2024

Permit Issued To:TRUSTEES OF COLUMBIA UNIVERSITY IN CITY OF NEW YORK

535 W 116TH ST NEW YORK, NY 10027

Contact: PHIL KRETZMER

> COLUMBIA UNIV 622 W 132ND ST NEW YORK, NY 10027

(212) 851-0151

Facility: COLUMBIA UNIVERSITY - MANHATTANVILLE CAMPUS/FACILITIES

UTILITY IMPROVEMENT PROJECT

637 W 125TH ST & 615 W 131ST ST

NEW YORK, NY 10027

Contact: MICHAEL HAESER

COLUMBIA UNIV- DIR DISTRICT ENERGY SYSTEM

622 W 132ND ST NEW YORK, NY 10027

(212) 853-0632

Description:

Manhattanville Development Columbia University (MDCU) located at 605 West 129" Street, New York, NY 10027 is developing a portion of Manhattanville section of West Harlem in order to facilitate new academic mixed use facilities.

MDCU currently has an Air State Facility permit to operate a total of four identical Babcock & Wilcox FM 10-57 boilers with COEN ECOjet-SLN Ultra Low NOx burners, each rated at a maximum heat input rating of 54.26 MMBtu/hr. In 2017 only two boilers were installed. The remainder of two boilers will be installed at a later time. The boilers fire natural gas or No. 2 oil. Two boilers will be connected to a stack. Thus, a total of two stacks will be used to emit flue gases.

The current permit has a NOx limit of 20.4 lbs/MMSCF for natural gas fired in boilers. However, the facility is applying to increase this limit to 35.0 lbs/MMSCF demonstrated through the stack test of February 2018. Additionally, NOx emission factor for operation boilers on distillate oil, will be lowered from its current value of 0.02 lbs/gallon to 0.01 lbs/gallon. The



new NOx emission factor for distillate oil is based on the March 2017 stack test results.

The NOx emissions from the combustion sources at the facility will be capped at 24.9 tons per year, including exempt and trivial activity sources. This permit is subject to the provisions of the State Facility requirements specified under 6NYCRR 201-7.

Records demonstrating compliance with this cap will be kept in accordance with the permit specific conditions.

The Air State Facility permit contains a listing of the applicable federal, state, and compliance monitoring conditions.

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: | STEPHEN A WATTS 47-40 21ST ST |
|-----------------------|---|
| Authorized Signature: | LONG ISLAND CITY, NY 11101-5401 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.



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
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 2 HEADQUARTERS



Facility DEC ID: 2620201787

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.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for 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.

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Condition 2-1: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 2-1.1:

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.

Item2-1.2:

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

Item 2-1.3

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, 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 2
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 2 Headquarters Division of Environmental Permits

> DEC Permit Conditions Mod 2/FINAL



1 Hunters Point Plaza, 4740 21st Street Long Island City, NY 11101-5407 (718) 482-4997



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Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY

PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:TRUSTEES OF COLUMBIA UNIVERSITY IN CITY OF NEW YORK 535 W 116TH ST NEW YORK, NY 10027

Facility: COLUMBIA UNIVERSITY - MANHATTANVILLE CAMPUS/FACILITIES

UTILITY IMPROVEMENT PROJECT

637 W 125TH ST & 615 W 131ST ST

NEW YORK, NY 10027

Authorized Activity By Standard Industrial Classification Code: 6513 - APARTMENT BUILDING OPERATORS

Mod 0 Permit Effective Date: 07/03/2014 Permit Expiration Date: 07/02/2024

Mod 2 Permit Effective Date: 02/13/2019 Permit Expiration Date: 07/02/2024



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LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS Facility Level

- 1 6 NYCRR 201-3.2 (a): Exempt Sources Proof of Eligibility
- 2 6 NYCRR 201-3.2 (a): Compliance Demonstration
- 3 6 NYCRR Subpart 201-7: Facility Permissible Emissions
- *2-1 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 22 6 NYCRR 211.2: Visible Emissions Limited
- 8 6 NYCRR 225-1.2 (f): Compliance Demonstration
- 9 6 NYCRR 225-1.2 (g): Compliance Demonstration
- 10 6 NYCRR 225-1.2 (h): Compliance Demonstration
- 11 6 NYCRR 225-1.6 (f): Compliance Demonstration
- 12 6 NYCRR 227-1.3 (a): Compliance Demonstration
- 13 6 NYCRR Subpart 231-13: Compliance Demonstration
- 14 40CFR 60.48c(f)(1), NSPS Subpart Dc: Compliance Demonstration
- 15 40CFR 60, NSPS Subpart IIII: Applicability
- 16 40CFR 63, Subpart JJJJJJ: Applicability
- 2-2 40CFR 63, Subpart ZZZZ: Compliance and Enforcement

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- 17 ECL 19-0301: Contaminant List
- 18 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 19 6 NYCRR Subpart 201-5: Emission Unit Definition
- 20 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 21 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 6 6 NYCRR 211.1: Air pollution prohibited

Emission Unit Level

- 23 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 24 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

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)



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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: Exempt Sources - Proof of Eligibility

Effective between the dates of 07/03/2014 and 07/02/2024

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

Item 1.1:

The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

Condition 2: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

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

Item 2 1

The Compliance Demonstration activity will be performed for the Facility.

Item 2.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC

OPERATIONS

Monitoring Description:

AS PROOF OF EXEMPT ELIGIBILITY FOR THE EMERGENCY GENERATORS, THE FACILITY MUST

MAINTAIN MONTHLY RECORDS WHICH

DEMONSTRATE THAT EACH ENGINE IS OPERATED LESS THAN 500 HOURS PER YEAR, ON A

12-MONTH ROLLING TOTAL BASIS.

Work Practice Type: HOURS PER YEAR OPERATION

Upper Permit Limit: 500.0 hours Monitoring Frequency: MONTHLY

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Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 3: Facility Permissible Emissions

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 3.1:

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: 0NY210-00-0 (From Mod 2) PTE: 49,800 pounds

per year

Name: OXIDES OF NITROGEN

Condition 2-1: Capping Monitoring Condition

Effective between the dates of 02/13/2019 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 2-1.1:

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 6 NYCRR Subpart 231-2

Item 2-1.2:

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

Item 2-1.3:

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 2-1.4:

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 2-1.5:



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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 2-1.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 2-1.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The NOx (oxides of nitrogen) emissions are capped at 24.9

tons per year.

The owner or operator shall maintain a record of the quantity of each fuel fired at the facility. Also, the owner or operator shall calculate (based on the fuel quantity) using the following formula:

D(0.01) + E(0.44) + GN(35) < 49,800 lbs/yr of Oxides of Nitrogen emissions.

Where:

D = 12-month rolling total of distillate oil fired (from

boiler) in gals/yr

 $0.01\ lbs/gal$ - NOx emission factor demonstrated through the stack test of March 2017

E = 12-month rolling total of distillate oil fired (from

engines) in gals/yr 0.44 lbs/gal - NOx emission factor (AP-42)

GN = 12-month rolling total of natural gas fired (from

boilers) in MMSCF/yr,

35 lb/mmscf - NOx emission factor demonstrated through the

stack test of February 2018

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 24.9 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 1/30/2020.

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

Condition 22: Visible Emissions Limited



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Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR 211.2

Item 22.1:

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 8: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR 225-1.2 (f)

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 and/or operators of commercial, industrial, or residential emission sources that fire number two heating oil on or after July 1, 2012 are limited to the purchase of number two heating oil with 0.0015 percent sulfur by weight or less. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 HEATING 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: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 9: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024



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Applicable Federal Requirement: 6 NYCRR 225-1.2 (g)

Item 9.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners and/or operators of a stationary combustion installation that fires distillate oil other than number two heating oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

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: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 10: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement:6 NYCRR 225-1.2 (h)

Item 10.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

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Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

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: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 11: Compliance Demonstration
Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR 225-1.6 (f)

Item 11.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 11.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Facility owners subject to this Subpart must submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an exceedances takes place.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such



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records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 12: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR 227-1.3 (a)

Item 12.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 12.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one 6 minute period per hour of not more than 27 percent opacity. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from the emission unit, process, etc. to which this condition applies at the monitoring frequency stated below while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree of opacity and will notify the NYSDEC if the Method 9 test indicates that the opacity standard is not met.



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Records of visible emissions observations (or any follow-up Method 9 tests), investigations and corrective actions will be kept on-site. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY Upper Permit Limit: 20 percent

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 13: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 6 NYCRR Subpart 231-13

Item 13.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY750-00-0 CARBON DIOXIDE EQUIVALENTS

Item 13.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC

OPERATIONS

Monitoring Description:

Facility-wide Greenhouse Gas emissions (as CO2e) are limited to an annual maximum of 100,000 tons per year

rolled monthly.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: FUEL

Upper Permit Limit: 100000 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 14: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement:40CFR 60.48c(f)(1), NSPS Subpart Dc

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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:

Fuel supplier certification shall include the following information for distillate oil:

- i) The name of the oil supplier, and
- ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c. 60-Dc 41c defines distillate oil as fuel that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, A standard Specification for Fuel Oils.
- iii) The sulfur content or maximum sulfur content of the oil.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 15: Applicability

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 40CFR 60, NSPS Subpart IIII

Item 15.1:

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

Condition 16: Applicability

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable Federal Requirement: 40CFR 63, Subpart JJJJJJ

Item 16.1:

Facilities that are area sources of HAP with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 63 JJJJJJ.

Condition 2-2: Compliance and Enforcement

Effective between the dates of 02/13/2019 and 07/02/2024

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Applicable Federal Requirement: 40CFR 63, Subpart ZZZZ

Item 2-2.1:

The Department has not accepted delegation of 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 63 Subpart ZZZZ during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.



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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.



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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 17: Contaminant List

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable State Requirement: ECL 19-0301

Item 17.1:

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

CAS No: 0NY750-00-0

Name: CARBON DIOXIDE EQUIVALENTS

Condition 18: Malfunctions and start-up/shutdown activities

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable State Requirement: 6 NYCRR 201-1.4

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Item 18.1:

- (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 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 19: Emission Unit Definition

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 19.1(From Mod 0):

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

Emission Unit: U-00001 Emission Unit Description:

This unit consists of four identical 54.26 mmbtu/hr boilers, each firing natural gas or No.2 fuel oil. Two boilers will be connected to one stack. Thus, a total of two stacks will support four boilers for flue gases



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exhaust.

Building(s): Cent Plant

Condition 20: Renewal deadlines for state facility permits

Effective between the dates of 07/03/2014 and 07/02/2024

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

Item 20.1:

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 21: Compliance Demonstration

Effective between the dates of 07/03/2014 and 07/02/2024

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

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:

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 2 47-40 21st St. Long Island City, NY 11101

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 6: Air pollution prohibited

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable State Requirement: 6 NYCRR 211.1

Item 6.1:

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

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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.

**** Emission Unit Level ****

Condition 23: Emission Point Definition By Emission Unit

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 23.1(From Mod 0):

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

Emission Unit: U-00001

Emission Point: E0001

Height (ft.): 277 Diameter (in.): 48

NYTMN (km.): 4519.097 NYTME (km.): 587.839 Building: Cent Plant

Emission Point: E0002

Height (ft.): 277 Diameter (in.): 48

NYTMN (km.): 4519.097 NYTME (km.): 587.839 Building: Cent Plant

Condition 24: Process Definition By Emission Unit

Effective between the dates of 07/03/2014 and 07/02/2024

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 24.1(From Mod 0):

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

Emission Unit: U-00001

Process: BNG Source Classification Code: 1-03-006-02

Process Description: Firing natural gas in boilers.

Emission Source/Control: S0001 - Combustion Design Capacity: 54.26 million Btu per hour

Emission Source/Control: S0002 - Combustion Design Capacity: 54.26 million Btu per hour

Emission Source/Control: S0003 - Combustion Design Capacity: 54.26 million Btu per hour

Emission Source/Control: S0004 - Combustion Design Capacity: 54.26 million Btu per hour

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Item 24.2(From Mod 0):

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

Emission Unit: U-00001

Process: BOI Source Classification Code: 1-03-005-02

Process Description: Firing #2 fuel oil in permanent boilers.

Emission Source/Control: S0001 - Combustion Design Capacity: 54.26 million Btu per hour

Emission Source/Control: S0002 - Combustion Design Capacity: 54.26 million Btu per hour

Emission Source/Control: S0003 - Combustion Design Capacity: 54.26 million Btu per hour

Emission Source/Control: S0004 - Combustion Design Capacity: 54.26 million Btu per hour