



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 9-1464-00153/00004
Effective Date: 11/08/2016 Expiration Date: 11/07/2021

Permit Issued To: INDECK-ENERGY SERVICES INC
600 N BUFFALO GROVE RD - STE 300
BUFFALO GROVE, IL 60089-2432

Contact: JAMES SCHNEIDER
INDECK ENERGY SERVICES
600 NORTH BUFFALO GROVE RD # 300
BUFFALO GROVE, IL 60089-2432
(847) 520-3212

Facility: INDECK-YERKES ENERGY SERVICES
1 SHERIDAN DR
TONAWANDA, NY 14150

Contact: TODD DOBMEIER
INDECK-YERKES ENERGY SERVICES
1 SHERIDAN DR
TONAWANDA, NY 14150
(716) 874-9088

Description: **INDECK-YERKES ENERGY SERVICES, INC**
TITLE V PERMIT
SITE DESCRIPTION

Indeck-Yerkes Energy Services, Inc. (Indeck) is a combined cycle Cogeneration Plant, which produces both electricity and steam. The facility, which is located at 1 Sheridan Drive in the Town of Tonawanda, Erie County New York, commenced operation in 1988. Indeck uses a General Electric Frame 6 (PG6541(B)) Gas Turbine generator, with a design output rating of 42 megawatts (MW), to produce electrical power and waste heat. A natural gas-fired duct burner, located upstream from the waste heat recovery steam generator (HRSG) and downstream from the gas turbine, is used to supply additional heat for the HRSG. Exhaust gas flows from the turbine to the duct burner through the HRSG and out the stack. A GE steam turbine, driven by the steam from the HRSG, produces up to 19.3 MW of additional electricity. The electricity produced by the gas and steam turbines is sold on the open market. Up to 75,000 lbs/hr of low pressure (550 psig) saturated steam is provided daily to the adjoining DuPont-Yerkes Production Plant from the steam turbine, or from an auxiliary boiler when the gas turbine, HRSG, and steam turbine are not operating. This application is for the 2nd renewal of Indeck's existing Title V air permit.



The Title V Permit includes two emission units: Y-00001 and Y-00002. Emission Unit Y-00001 consists of the gas turbine and duct burner, which correspond to emission sources Y00GT and Y00DB, respectively. This emission unit consists of four processes: No. 005: the gas turbine co-firing natural gas and #2 fuel oil with or without the firing of the duct burner, No. 006: the gas turbine firing on only natural gas without the firing of the duct burner No. 007: the gas turbine operating with No. 2 fuel oil with or without the duct burner firing and process No. 009: the gas turbine operating on only natural gas while firing the duct burner. Emission Unit Y-00002 consists of one emission source, Y0AUX, which is the auxiliary boiler. This emission unit contains two processes - No. 010: the auxiliary boiler fueled with natural gas and No. 011: the auxiliary boiler fueled with No. 2 oil.

There are several sources that are exempt from permitting. Exempt sources include four fuel oil tanks, a water treatment system, a three-cell non-contact water cooling tower, a fire pump and an emergency generator. The engines for both the fire pump and emergency generator are subject to 40 CFR 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The facility is operated through a Westinghouse Distribution Control System (WDCS). Natural gas is the primary fuel used at the facility, with No. 2 fuel oil as the back-up for both the stationary gas turbine and the auxiliary boiler. Indeck's annual use of No. 2 fuel oil is limited to 11.5 million gallons for the facility. Oil firing of the gas turbine and auxiliary boiler is limited to 1440 hours each annually. The facility operates the gas turbine between 80% and 100% loads while firing No. 2 fuel oil or co-firing natural gas and No. 2 fuel oil. While firing natural gas only, the turbine may operate at 24 MW or greater. In addition, subpart 225-1 was revised in March of 2013 and now prohibits the firing of No. 2 fuel oil with a sulfur content greater than 0.0015% sulfur by weight (15ppm) on and after July 1st of 2016. This new in fuel sulfur limit is more restrictive than the PSD sulfur limit of 0.3% sulfur by weight. However, both limits still apply to the facility.

The GE Frame 6 gas turbine generator has a design heat input capacity of 476 million Btu per hour (MMBTU/hr) @ 48degrees Fahrenheit ambient inlet air temperature. The gas turbine is equipped with an evaporative cooler which cools the turbine inlet air, increasing the inlet mass air flow and subsequently the turbine efficiency and power output. Oxides of Nitrogen (NOx) emissions from the gas turbine are controlled by steam injection to the combustion chambers. DeNOx steam injection rate is controlled by a proprietary GE Mark IV control system (emission control: Y000SI). This system can control NOx emissions to within 1.5 ppm by varying steam injection rate to compensate for changes in ambient air temperatures, load, barometric pressure, and humidity. Along with ambient air correction, the Mark IV continuously monitors the control algorithm to adjust steam injection rate to maintain a constant NOx emission rate. The Davis Duct Burner has a design heat input capacity of 30 MMBTU/hr and is fueled with natural gas only. The interior of the duct burner is lined with fins. This creates turbulence, which promotes mixing with the combustion air, thereby decreasing the level of NOx emissions. These sources exhaust emissions through one stack, Emission Point (EP) 00001.



To monitor nitrogen oxide (NO_x), carbon monoxide (CO) and oxygen (O₂) levels in the exhaust gas at EP00001, Indeck uses a Continuous Emissions Monitoring System (CEMS).

The extractive CEMS analyzes undiluted O₂ and undiluted NO_x and CO concentrations on a dry basis. Outputs from each component of the CEM system are recorded and stored using a Data Acquisition and Handling System (DAHS). Nitrogen oxide concentrations in the exhaust gas are determined using a California Analytical Instrument, Model 600CLD. The CO and O₂ concentrations are determined using a California Analytical Instrument, Model 601P. The calibration of the CEMS is checked daily utilizing certified calibration gas.

The auxiliary boiler is a Zurn package boiler. The fuel valve stops of the boiler have been welded in place to limit the heat input capacity to 99 MMBTU/hr. This was done to keep the boiler below applicability for NSPS Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. By limiting the heat rating to less than 100 MMBTU/hr it is categorized as a Small Steam Generating Unit and is subject to NSPS Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. This cap also categorizes this boiler as a Midsize Boiler for NO_x RACT. Subpart Dc does not require a CEMs to be installed on the boiler. The requirements for subpart Dc are less restrictive than the PSD limits. A Flue gas recirculation (FGR) is used to control NO_x emissions by recirculating a portion of the flue gas from the auxiliary boiler into the main combustion chamber. By reducing the peak combustion temperature and the percentage of oxygen in the combustion air/flue gas mixture, FGR reduces the formation of thermal NO_x in the boiler and subsequently NO_x emissions. The boiler emissions vent into one stack, identified as EP 00002.

The auxiliary boiler last fired on fuel oil in March of 1999 when it was tested during the installation of the flue gas recirculation system. Should Indeck Yerkes intend to burn oil in the auxiliary boiler again, it will become subject to 40 CFR 63 Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources and must comply with the requirement therein. Subpart JJJJJ (6Js) was not included in the previous permits because the rule became effective on May 20th of 2011, which is after Indeck Yerkes last permit update.

This facility is subject to the Best Available Control Technology (BACT) requirements under 40 CFR 52.21(j), Prevention of Significant Deterioration (PSD) for emissions of sulfur dioxide (SO₂), NO_x, particulates (PM) and particulates with a diameter equal to or less than 10 micro-meters (PM-10). Indeck Yerkes conducted the BACT analysis in 1988. The use of low sulfur fuel oil (0.3 percent sulfur by weight), steam injection system in the stationary gas turbine and installment of a low NO_x duct burner constituted BACT for the facility for both; SO₂ and NO_x emissions. Firing of natural gas as the primary fuel (75% of the time) and No. 2 fuel oil as back-up fuel (25% of the time) in the gas turbine were considered to be BACT for PM and PM-10 emissions. Since CO and NO_x emission are inversely related, CO concentrations will increase with decreasing NO_x concentrations. The decrease in NO_x emissions are due to the controls that were installed. The PSD analysis resulted in a limit also being placed on CO to avoid a significant increase of CO emissions. The emission limits for NO_x, CO, PM, and PM-10 emissions from the gas turbine, duct burner, and auxiliary boiler were established through BACT analysis and the



performance tests of the combustion equipment required under 40CFR60, Subpart A. The stationary gas turbine, duct burner and auxiliary boiler are also subject to 40 CFR 60, New Source Performance Standards, Subparts GG—Standards of Performance for Stationary Gas Turbines and Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (auxiliary boiler and duct burner), 6NYCRR 227-2 Reasonably Available Control Technology (RACT) for Oxides of Nitrogen and 6NYCRR 225-1, Fuel Composition and Use - Sulfur Limitations. The requirements for NOx RACT, as they apply to the gas turbine/duct burner are equivalent to the requirements for PSD. However, the current 227-2 NOx RACT requirements for the auxiliary boiler limits NOx emission to 0.08 lbs/MMBTU.

The sulfur in fuel limit of 0.0015% sulfur by weight required by 6NYCRR part 225-1.2(h) is more stringent than the limit set by the PSD of 0.3% sulfur by weight. Process 007 of Emission Unit Y-00001(oil only in the turbine) is subject to the requirements of 6NYCRR 227-1, Stationary Combustion Installations. All combustion installations are subject to the opacity standards of 6NYCRR 227-1, while firing fuel oil. Process 011 in Emission Unit Y-00002 (oil firing in boiler) is subject to the particulate limit and stack testing requirements of 6NYCRR 227-1.2(a)(1), EU Y-00001 is an “affected unit” under the Acid Rain Program and is subject to the requirements of 40CFR72. The Acid Rain Permit is a separate permit. This emission unit is also subject to the Cross-State Air Pollution Rule (CSAPR) requirements of 40 CFR Part 97 which includes: Subpart AAAAA—TR NOx Annual Trading Program, Subpart BBBBB—TR NOx Ozone Season Trading Program and Subpart CCCCC—TR SO2 Group 1 Trading Program. CSAPR is intended to replace previous state Clean Air Interstate Rules (CAIR) for NOx and SO2; 6NYCRR 243, 6NYCRR 244 and 6NYCRR 245.

An applicability determination, conducted for 40 CFR 64, Compliance Assurance Monitoring (CAM), showed that the gas turbine (EU Y-00001) and auxiliary boiler (EU Y00002) are not subject to the requirements of CAM. In accordance with 40 CFR 64.2(b)(1)(vi), since the gas turbine is required to use a CEMS (a continuous compliance determination method as defined in 40 CFR 64.1) to comply with the NOx limits specified under PSD, NOx RACT and Subpart GG, it is exempt from CAM requirements. In addition, since the potential pre-control emissions of NOx and PM from the auxiliary boiler do not meet or exceed the major source threshold of 100 tpy for each contaminant, CAM does not apply to the auxiliary boiler.

This Title V permit contains a complete listing of the applicable federal, state and compliance monitoring requirements for the facility, its emission units, processes and sources. Appendix A contains Figures 3-5 which shall be utilized to determine power output and mass emissions based on temperature and load.

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.

New York State Department of Environmental Conservation
Facility DEC ID: 9146400153



Permit Administrator: DAVID S DENK
 DIVISION OF ENVIRONMENTAL PERMITS
 270 MICHIGAN AVE
 BUFFALO, NY 14203-2915

Authorized Signature: _____ Date: ____ / ____ / _____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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



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 9 HEADQUARTERS



DEC GENERAL CONDITIONS

****** General Provisions ******

For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.

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 the expiration of permits for Title V and State Facility Permits.

Item 3.3

Permits are transferrable with the approval of the department unless specifically prohibited by



the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

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 9 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 9 Headquarters
Division of Environmental Permits
270 Michigan Avenue
Buffalo, NY 14203-2915
(716) 851-7165

New York State Department of Environmental Conservation

Permit ID: 9-1464-00153/00004

Facility DEC ID: 9146400153



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: INDECK-ENERGY SERVICES INC
600 N BUFFALO GROVE RD - STE 300
BUFFALO GROVE, IL 60089-2432

Facility: INDECK-YERKES ENERGY SERVICES
1 SHERIDAN DR
TONAWANDA, NY 14150

Authorized Activity By Standard Industrial Classification Code:
4911 - ELECTRIC SERVICES
4931 - ELEC & OTHER SERVICES COMBINED

Permit Effective Date: 11/08/2016

Permit Expiration Date: 11/07/2021



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6 NYCRR 201-6.4 (a) (7): Fees
- 3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
- 4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
- 5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
- 6 6 NYCRR 201-6.4 (e): Compliance Certification
- 7 6 NYCRR 202-2.1: Compliance Certification
- 8 6 NYCRR 202-2.5: Recordkeeping requirements
- 9 6 NYCRR 215.2: Open Fires - Prohibitions
- 10 6 NYCRR 200.7: Maintenance of Equipment
- 11 6 NYCRR 201-1.7: Recycling and Salvage
- 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
- 16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
- 17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
- 18 6 NYCRR 202-1.1: Required Emissions Tests
- 19 40 CFR Part 68: Accidental release provisions.
- 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 21 6 NYCRR 200.3: False statement
- 22 6 NYCRR 201-3.2 (c) (6): Compliance Certification
- 23 6 NYCRR Subpart 201-6: Emission Unit Definition
- 24 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
- 25 6 NYCRR 211.1: Air pollution prohibited
- 26 6 NYCRR 225-1.2: Compliance Certification
- 27 6 NYCRR 227-1.2 (a) (1): Compliance Certification
- 28 6 NYCRR 227-1.3: Compliance Certification
- 29 6 NYCRR 227-1.6: Corrective Action
- 30 6 NYCRR 227-1.7: Compliance Certification
- 31 40CFR 52.21(j), Subpart A: Posting of the emission limits and operating restrictions
- 32 40CFR 52.21(j), Subpart A: Compliance Certification
- 33 40CFR 52.21(j), Subpart A: Compliance Certification
- 34 40CFR 60, NSPS Subpart A: Applicability of Subpart A General Provisions
- 35 40CFR 60.4, NSPS Subpart A: EPA Region 2 address.
- 36 40CFR 60.7(b), NSPS Subpart A: Recordkeeping requirements.
- 37 40CFR 60.7(c), NSPS Subpart A: Compliance Certification
- 38 40CFR 60.7(d), NSPS Subpart A: Excess emissions report.
- 39 40CFR 60.7(f), NSPS Subpart A: Facility files for subject sources.
- 40 40CFR 60.11, NSPS Subpart A: Opacity standard compliance testing.
- 41 40CFR 60.12, NSPS Subpart A: Circumvention.
- 42 40CFR 60.13, NSPS Subpart A: Monitoring requirements.



- 43 40CFR 60.48c(g), NSPS Subpart Dc: Compliance Certification
- 44 40CFR 63, Subpart ZZZZ: Applicability
- 45 40CFR 63, Subpart ZZZZ: Compliance and Enforcement
- 46 40CFR 63.6603(a), Subpart ZZZZ: Compliance Certification
- 47 40CFR 63.6640(a), Subpart ZZZZ: Compliance Certification
- 48 40CFR 97.406, Subpart AAAAA: Compliance Certification
- 49 40CFR 97.506, Subpart BBBBB: Compliance Certification
- 50 40CFR 97.606, Subpart CCCCC: Compliance Certification

Emission Unit Level

- 51 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 52 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

EU=Y-00001

- 53 40CFR 52.21(j), Subpart A: CEM Reports
- 54 40CFR 52.21(j), Subpart A: Gas Turbine Output as a Function of Temperature and Load
- 55 40CFR 52.21(j), Subpart A: Compliance Certification
- 56 40CFR 52.21(j), Subpart A: Compliance Certification
- 57 40CFR 52.21(j), Subpart A: Compliance Certification
- 58 40CFR 52.21(j), Subpart A: Compliance Certification
- 59 40CFR 52.21(j), Subpart A: Compliance Certification
- 60 40CFR 52.21(j), Subpart A: Compliance Certification
- 61 40CFR 52.21(j), Subpart A: Compliance Certification
- 62 40CFR 52.21(j), Subpart A: Compliance Certification
- 63 40CFR 52.21(j), Subpart A: Compliance Certification
- 64 40CFR 52.21(j), Subpart A: Compliance Certification
- 65 40CFR 52.21(j), Subpart A: Compliance Certification
- 66 40CFR 52.21(j), Subpart A: Compliance Certification
- 67 40CFR 52.21(j), Subpart A: Compliance Certification
- 68 40CFR 52.21(j), Subpart A: Compliance Certification
- 69 40CFR 52.21(j), Subpart A: Compliance Certification
- 70 40CFR 52.21(j), Subpart A: Compliance Certification
- 71 40CFR 52.21(j), Subpart A: Compliance Certification
- 72 40CFR 52.21(j), Subpart A: Compliance Certification
- 73 40CFR 52.21(j), Subpart A: Compliance Certification
- 74 40CFR 52.21(j), Subpart A: Compliance Certification
- 75 40CFR 52.21(j), Subpart A: Compliance Certification
- 76 40CFR 52.21(j), Subpart A: Compliance Certification
- 77 40CFR 52.21(j), Subpart A: Compliance Certification
- 78 40CFR 52.21(j), Subpart A: Compliance Certification
- 79 40CFR 52.21(j), Subpart A: Compliance Certification
- 80 40CFR 52.21(j), Subpart A: Compliance Certification
- 81 40CFR 60.332(a)(1), NSPS Subpart GG: Compliance Certification
- 82 40CFR 60.332(f), NSPS Subpart GG: Exemption from NOx standard.
- 83 40CFR 60.333(b), NSPS Subpart GG: Compliance Certification
- 84 40CFR 60.334(b), NSPS Subpart GG: CEMS
- 85 40CFR 60.334(h)(1), NSPS Subpart GG: Compliance Certification
- 86 40CFR 60.334(h)(2), NSPS Subpart GG: Compliance Certification
- 87 40CFR 60.334(h)(3), NSPS Subpart GG: Compliance Certification
- 88 40CFR 60.334(i)(1), NSPS Subpart GG: Compliance Certification
- 89 40CFR 60.334(j), NSPS Subpart GG: Compliance Certification
- 90 40 CFR Part 72: Facility Subject to Title IV Acid Rain Regulations



and Permitting

EU=Y-00001,Proc=007

91 6 NYCRR 227-1.2 (b): Multiple combustion sources.

EU=Y-00001,EP=00001,Proc=005

92 40CFR 52.21(j), Subpart A: Compliance Certification

93 40CFR 52.21(j), Subpart A: Compliance Certification

EU=Y-00001,EP=00001,Proc=007

94 40CFR 52.21(j), Subpart A: Compliance Certification

EU=Y-00001,EP=00001,Proc=009,ES=Y00DB

95 40CFR 52.21(j), Subpart A: Compliance Certification

EU=Y-00002

96 40CFR 52.21(j), Subpart A: Emission limits based on heat input

97 40CFR 52.21(j), Subpart A: Compliance Certification

98 40CFR 52.21(j), Subpart A: Compliance Certification

99 40CFR 52.21(j), Subpart A: Compliance Certification

100 40CFR 52.21(j), Subpart A: Compliance Certification

101 40CFR 52.21(j), Subpart A: Compliance Certification

102 40CFR 52.21(j), Subpart A: Compliance Certification

103 40CFR 52.21(j), Subpart A: Compliance Certification

104 40CFR 63, Subpart JJJJJ: Compliance Certification

EU=Y-00002,Proc=011

105 6 NYCRR 227.2 (b) (1): Compliance Certification

106 40CFR 60.42c(h), NSPS Subpart Dc: Exemption from the averaging period.

107 40CFR 60.42c(i), NSPS Subpart Dc: Enforceability

108 40CFR 60.43c(c), NSPS Subpart Dc: Compliance Certification

109 40CFR 60.43c(d), NSPS Subpart Dc: Enforceability of particulate matter and opacity standards.

110 40CFR 60.44c(h), NSPS Subpart Dc: Alternative compliance methods for sulfur dioxide.

111 40CFR 60.45c, NSPS Subpart Dc: Compliance methods for particulate matter.

112 40CFR 60.48c, NSPS Subpart Dc: Recordkeeping and reporting.

113 40CFR 60.48c(f)(1), NSPS Subpart Dc: Compliance Certification

EU=Y-00002,EP=00002

114 6 NYCRR 227-2.4 (c) (1) (ii): Compliance Certification

EU=Y-00002,EP=00002,Proc=011

115 40CFR 52.21(j), Subpart A: Compliance Certification

116 40CFR 60.42c(d), NSPS Subpart Dc: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

117 ECL 19-0301: Contaminant List

118 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities

New York State Department of Environmental Conservation

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- 119 6 NYCRR 242-1.5: Compliance Demonstration
- 120 6 NYCRR Subpart 242-4: Compliance Demonstration
- 121 6 NYCRR Subpart 242-8: Compliance Demonstration



FEDERALLY ENFORCEABLE CONDITIONS

****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

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

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

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

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

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

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

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

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

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

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and



reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

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

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

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

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

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

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

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

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V



facility for any violation of applicable requirements prior to or at the time of permit issuance;

iii. The applicable requirements of Title IV of the Act;

iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

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

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

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

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

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

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

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

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



a shorter time period in the case of an emergency.

Item K: Permit Exclusion - ECL 19-0305

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

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

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

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

**Condition 1: Acceptable Ambient Air Quality
Effective between the dates of 11/08/2016 and 11/07/2021**

Applicable Federal Requirement: 6 NYCRR 200.6

Item 1.1:

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



Condition 5: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

Submit reports of any required monitoring at a minimum frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring



report required above.

(4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks to have a violation excused unless otherwise limited by regulation. In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate



whether or not the Department or EPA has approved the results.

All semiannual reports may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 6: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 6 NYCRR 201-6.4 (e)

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

- i. Compliance certifications shall contain:
 - the identification of each term or condition of the permit that is the basis of the certification;
 - the compliance status;
 - whether compliance was continuous or intermittent;
 - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
 - such other facts as the Department may require to



determine the compliance status of the facility as specified in any special permit terms or conditions; and

- such additional requirements as may be specified elsewhere in this permit related to compliance certification.

ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.

iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

iv. All annual compliance certifications may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). The mailing addresses for the above referenced persons are:

Chief – Stationary Source Compliance Section
USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

Regional Air Pollution Control Engineer
NYSDEC Region 9 Headquarters
270 Michigan Avenue
Buffalo, NY 14203-2915

The address for the BQA is as follows:

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NYSDEC
Bureau of Quality Assurance
625 Broadway
Albany, NY 12233-3258

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:

The Compliance Certification activity will be performed for the Facility.

Item 7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air Resources, Bureau of Air Quality Planning, 625 Broadway, Albany NY 12233-3251

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due by April 15th for previous calendar year

Condition 8: Recordkeeping requirements
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 8.1:

(a) The following records shall be maintained for at least five years:

(1) a copy of each emission statement submitted to the department; and

(2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

Condition 9: Open Fires - Prohibitions



Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 6 NYCRR 215.2

Item 9.1:

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

Item 9.2

Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

- (a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
- (h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
- (i) Prescribed burns performed according to Part 194 of this Title.
- (j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
- (k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
- (l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.



**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period.

[NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

Condition 10: Maintenance of Equipment
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 200.7

Item 10.1:

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

Condition 11: Recycling and Salvage
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 11.1:

Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

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.

Condition 13: Exempt Sources - Proof of Eligibility
Effective between the dates of 11/08/2016 and 11/07/2021

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

Item 13.1:

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



Condition 17: Off Permit Changes

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 201-6.4 (f) (6)

Item 17.1:

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

(i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(ii) The permit shield described in section 6 NYCRR 201-6.4 shall not apply to any change made pursuant to this paragraph.

Condition 18: Required Emissions Tests

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 18.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 19: Accidental release provisions.

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40 CFR Part 68

Item 19.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;



OPERATIONS

Monitoring Description:

Indeck-Yerkes operates one (1) diesel fired emergency generator at the Energy Center. This generator is considered exempt from permitting if used for emergencies only, including times when the usual sources of heat, power, water and lighting are temporarily unobtainable, or to provide power to fire-fighting equipment. As proof of exempt eligibility for the emergency generator, the facility shall maintain monthly records which demonstrate that the engine is operated less than 500 hours per year, including test firing, on a 12-month rolling total basis. An hour counter or similar device shall be used to monitor hours of operation, which shall be recorded each month in a permanently bound log book or other format acceptable to NYSDEC. The emergency generator shall be operated and maintained according to manufacturer's specifications to insure proper performance. Reports shall be submitted to the Department stating the hours of operation and fuel use on a 12 month rolling average.

In addition, Records demonstrating hours of operation, quantity of fuel fired, the manufacturer's maintenance requirements and the maintenance performed on this source shall be kept on-site for five years and be readily available to NYSDEC representatives upon request.

Work Practice Type: HOURS PER YEAR OPERATION

Upper Permit Limit: 499 hours

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 23: Emission Unit Definition
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 23.1:

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

Emission Unit: Y-00001

Emission Unit Description:

This emission unit consists of one GE Frame 6 combustion turbine (turbine) with a design heat input of 476 MMBTU/hr and 42 MW design power output at 48 degrees Fahrenheit. The turbine is equipped with an evaporative cooler which cools the turbine inlet air, increasing the inlet mass air flow and subsequently the turbine efficiency and power output. The emission unit is also equipped with a

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natural gas fired 30 MMBTU/hr duct burner which supplements the waste heat from the turbine for a heat recovery steam generator (HRSG) downstream. The HRSG supplies steam to DuPont Yerkes for production and also to a 19.3 MW steam turbine for additional power generation. The combustion turbine can fire natural gas, No. 2 fuel oil or a mixture of these fuels. Nitrogen oxide (NOx) emissions from the turbine are controlled by steam injection. Exhaust from the turbine and duct burner vent into one stack, emission point 00001, where emissions of NOx and CO are continuously monitored and recorded by a Continuous Emission Monitoring system (CEMs).

Building(s): 1

Item 23.2:

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

Emission Unit: Y-00002

Emission Unit Description:

This unit consists of a 99 MMBtu/hr auxiliary boiler which exhausts to the atmosphere through emission point 00002. The boiler may be fueled with either natural gas or No. 2 fuel oil and is used to generate steam for DuPont when the HRSG is not in use. The auxiliary boiler uses flue gas recirculation to control NOx emissions.

Building(s): 1

Condition 24: Progress Reports Due Semiannually
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 201-6.4 (d) (4)

Item 24.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Condition 25: Air pollution prohibited
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 211.1

Item 25.1:

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 26: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 6 NYCRR 225-1.2

Item 26.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

No person will sell, offer for sale, purchase, or fire any fuel which exceeds the sulfur-in-fuel limitations of this Section, except as provided in Sections 225-1.3 or 225-1.4 of this Subpart. For the purposes of this Subpart liquid bio-fuels, other than waste oils, will be required to meet the sulfur-in-fuel standards of either number two heating oil or distillate oil.

(g) 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.

(h) Owners and/or operators of any stationary combustion installation that fires distillate oil including number two heating 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



period per hour of not more than 27 percent opacity.

(b) Compliance with the opacity standard may be determined by:

(1) conducting observations in accordance with Reference Method 9;

(2) evaluating Continuous Opacity Monitoring System (COMS) records and reports; and/or

(3) considering any other credible evidence.

Operators of oil-fired combustion installations which are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

1) Observe the stack for each combustion installation which is operating on oil once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).

2) The results of each visual observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack: the date, time of day, weather conditions, observer's name, and whether any opacity was observed. Inclement weather conditions shall be recorded for those days when observations are prohibited. This logbook must be retained at the facility for five (5) years after the date of the last entry and shall be available for inspection by USEPA and/or Department representatives upon request.

3) Visible emissions greater than 0% opacity are not necessarily indicative of an emission violation, but rather serve as a trigger for additional testing and/or further investigation to determine compliance with the opacity limit. If the operator observes emissions greater than 0% opacity (other than steam**) two consecutive days firing oil (the firing of other fuels in between days of firing oil does not count as an interruption in the consecutive days of firing oil), then a Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis

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if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance. If, however, the opacity observed seems excessive and/or unusual and a Method 9 certified evaluator is not readily available to determine the opacity at that time, immediate attention is required to correct the problem causing the opacity. The results of any Method 9 analysis performed must be recorded in the daily logbook and the Visible Emissions Observation Field Data Sheet with a copy of the VEO Certification for the observer must be kept on-site. A description of the plume, the cause and corrective action taken shall also be documented in the daily logbook. Annual compliance certification and semi-annual monitoring reports are required.

Emission Unit Y-00002, Process 11 is also subject to the opacity requirements specified under 40CFR60.43c(c), which are equivalent to those under this Part. Therefore, compliance with the requirements specified under 6NYCRR227-1.3 shall fulfill the requirements of 40CFR60.43c(c).

All stationary combustion installations shall be operated and maintained according to manufacturer's specifications and tuned annually, at a minimum, to insure proper performance and compliance with the regulatory limit for opacity. Records demonstrating hours of operation, fuel usage, the manufacturer's maintenance requirements and procedures and maintenance/ tune-ups performed for these sources shall be maintained onsite for five years and be readily available to NYSDEC representatives upon request.

**** NOTE **** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

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most recent ASTM standard methods or equivalent methods acceptable to the commissioner.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 31: Posting of the emission limits and operating restrictions Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 31.1:

A summary of the emission limits and operating restrictions of this permit must be posted in the control room of the facility and must be plainly visible (without obstructions) to the operator of the facility.

Condition 32: Compliance Certification Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 32.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Total annual fuel oil use shall not exceed 11.5 million gallons based on a daily rolling basis. The daily amount of distillate oil burned in the gas turbine (Process 007 and Process 005), the auxiliary boiler (Process 011) and any other combustion sources (including exempt) shall be recorded in a permanently bound log book or other format acceptable to the Department. The quantity of fuel used shall be reported to the Department on a quarterly basis in the form of 365 daily rolled averages. Hardcopies of records must be maintained on-site and made available for inspection by a regulatory agency upon request.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NUMBER 2 OIL

Upper Permit Limit: 11.5 million gallons

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Item 37.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: Y-00001

Item 37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

Condition 42: Monitoring requirements.
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.13, NSPS Subpart A

Item 42.1:

All continuous monitoring systems and devices shall be installed, calibrated, maintained, and operated in accordance with the requirements of section 60.13.

Condition 43: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

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

Item 43.1:

The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: Y-00001	
Process: 009	Emission Source: Y00DB
Emission Unit: Y-00002	
Process: 010	Emission Source: Y0AUX
Emission Unit: Y-00002	
Process: 011	Emission Source: Y0AUX

Item 43.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of each affected facility (Emission Source (ES) Y0AUX (auxiliary boiler) and ES Y00DB (duct burner)) shall record and maintain records of the amounts of each fuel combusted during each day. The owner or operator of an affected facility that only burns very low sulfur fuel oil or other liquid or gaseous fuels with potential sulfur dioxide emissions rate of 140 ng/J (0.32 lb/MMBtu) heat input or less shall record and maintain records of the fuels combusted during each calendar month.

Both ES Y0AUX and ES Y00DB have maximum heat input capacities that are less than 100 mmBTU/hr. ES Y0AUX is permitted to combust either natural gas or No. 2 fuel oil.

ES Y00DB combusts natural gas only. Emission factors from AP-42 were used to determine the emission rate of sulfur dioxide for the combustion of No. 2 fuel oil and

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natural gas in boilers with heat input capacities of less than 100 mmBTU/hr. While firing No. 2 fuel oil with a sulfur content of 0.3% sulfur by weight and a heating value of 138 mmBTU/1000 gal, Y0AUX has a sulfur dioxide emission rate of 0.31 lb/mmBTU. The firing of natural gas with a sulfur content of 200 grains/10E6 scf and HHV of 1020 BTU/scf in ES Y0AUX and ES Y00DB results in an emission rate for sulfur dioxide of 0.00006 lb/mmBTU. Since these emission rates are both less than 0.32 lb/mmBTU, Indeck-Yerkes may record fuel usage monthly.

In addition, this permit also contains a more stringent sulfur requirements from Subpart 225-1: Fuel Composition and Use - Sulfur Limitations. Subpart 225 restricts the facility from burning #2 fuel oil (distillate) that has a sulfur content greater than 0.0015 percent sulfur by weight (15 ppm).

Monitoring Frequency: MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 44: Applicability

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 44.1:

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

Condition 45: Compliance and Enforcement

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 45.1:

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.



Condition 46: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 63.6603(a), Subpart ZZZZ

Item 46.1:

The Compliance Certification activity will be performed for the Facility.

Item 46.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of an existing emergency and black start compression ignition stationary RICE located at an area source of HAP emissions must comply with the following maintenance procedures:

- (1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- (3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Initial compliance will be demonstrated according to the provisions in 40 CFR 63.6630.

Continuous compliance will then be demonstrated according to 40 CFR 63.6640. The facility must keep records according to the provisions in 40 CFR 63.6655 and submit the notifications and reports listed in 40 CFR 63.6645 and 63.6650.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 47: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 63.6640(a), Subpart ZZZZ

Item 47.1:

The Compliance Certification activity will be performed for the Facility.

Item 47.2:

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Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A facility complying with the requirement to change oil and filter, inspect spark plugs, and inspect hoses and belts will demonstrate continuous compliance if each of the following is met:

1) develop an follow a site specific maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions; and

2) keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

Monitoring Frequency: ANNUALLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 48: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 97.406, Subpart AAAAA

Item 48.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(1) The facility shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.413 through 97.418 of Subpart AAAAA. The facility shall notify the Department of this representative (and alternative) with contact information upon issuance of this permit and when any changes are made to the representative (or alternative) or their contact information.

(2) The facility, and the designated representative, of each TR NOX Annual source (facility) and each TR NOx

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Annual Unit at the facility shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.430 through 97.435 of Subpart AAAAA and subpart H of part 75 of this chapter. This includes but is not limited to: requirements for installation, certification, and data accounting for all required monitoring systems; requirements for recording, reporting, and quality-assurance of the data; and certification of compliance of such data. Data from continuous emission monitoring equipment are submitted quarterly (calendar year). These reports are generally due 30 days after the end of a calendar quarter. All other monitoring data are submitted to the DEC semiannually (calendar year). These reports are due on January 30th and July 30th of each year.

(3) The emissions data determined shall be used to calculate allocations of TR NOx Annual allowances and to determine compliance with the TR NOx Annual emissions limitation and assurance provisions. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOx Annual facility and each TR NOx Annual Unit at the facility shall hold, in the facilities compliance account, TR NOx Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NOx emissions for such control period from all TR NOx Annual Units at the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 49: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 97.506, Subpart BBBBB

Item 49.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 49.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(1) The facility shall comply with the requirement to

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have a designated representative, and may have an alternate designated representative, in accordance with §§97.513 through 97.518 of Subpart BBBBB. The facility shall notify the Department of this representative (and alternative) with contact information upon issuance of this permit and when any changes are made to the representative (or alternative) or their contact information.

(2) The facility, and the designated representative, of each TR NOx Ozone Season source (facility) and each TR NOx Ozone Season Unit at the facility shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.530 through 97.535 of Subpart BBBBB and subpart H of part 75 of this chapter. This includes but is not limited to: requirements for installation, certification, and data accounting for all required monitoring systems; requirements for recording, reporting, and quality-assurance of the data; and certification of compliance of such data. Data from continuous emission monitoring equipment are submitted quarterly (calendar year). These reports are generally due 30 days after the end of a calendar quarter. All other monitoring data are submitted to the DEC semiannually (calendar year). These reports are due on January 30th and July 30th of each year.

(3) The emissions data determined shall be used to calculate allocations of TR NOx Ozone Season allowances and to determine compliance with the TR NOx Ozone Season emissions limitation and assurance provisions. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOx Ozone Season facility and each TR NOx Ozone Season Unit at the facility shall hold, in the facilities compliance account, TR NOx Ozone Season allowances available for deduction for such control period under §97.524(a) in an amount not less than the tons of total NOx emissions for such control period from all TR NOx Ozone Season Units at the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 50: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 97.606, Subpart CCCCC

Item 50.1:

The Compliance Certification activity will be performed for the Facility.

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Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 50.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(1) The facility shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.613 through 97.618 of Subpart CCCCC. The facility shall notify the Department of this representative (and alternative) with contact information upon issuance of this permit and when any changes are made to the representative (or alternative) or their contact information.

(2) The facility, and the designated representative, of each TR SO₂ Group 1 source (facility) and each TR SO₂ Group 1 Unit at the facility shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.630 through 97.635 of Subpart CCCCC and subpart H of part 75 of this chapter. This includes but is not limited to: requirements for installation, certification, and data accounting for all required monitoring systems; requirements for recording, reporting, and quality-assurance of the data; and certification of compliance of such data. Data from continuous emission monitoring equipment are submitted quarterly (calendar year). These reports are generally due 30 days after the end of a calendar quarter. All other monitoring data are submitted to the DEC semiannually (calendar year). These reports are due on January 30th and July 30th of each year.

(3) The emissions data determined shall be used to calculate allocations of TR SO₂ Group 1 allowances and to determine compliance with the TR SO₂ Group 1 emissions limitation and assurance provisions. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO₂ Group 1 facility and each TR SO₂ Group 1 Unit at the facility shall hold, in the facilities' compliance account, TR SO₂ Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all TR SO₂ Group 1 Units at the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION



Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**** Emission Unit Level ****

Condition 51: Emission Point Definition By Emission Unit
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 51.1:

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

Emission Unit: Y-00001

Emission Point: 00001

Height (ft.): 150 Diameter (in.): 117
NYTMN (km.): 4764.631 NYTME (km.): 180.487 Building: 1

Item 51.2:

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

Emission Unit: Y-00002

Emission Point: 00002

Height (ft.): 90 Diameter (in.): 36
NYTMN (km.): 4764.626 NYTME (km.): 180.477 Building: 1

Condition 52: Process Definition By Emission Unit
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 52.1:

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

Emission Unit: Y-00001

Process: 005 Source Classification Code: 2-01-001-01

Process Description:

This process consists of a GE Frame 6 gas turbine firing
on a mixture of No. 2 fuel oil and natural gas with or
without the duct burner firing.

Emission Source/Control: Y00DB - Combustion

Design Capacity: 30 million Btu per hour

Emission Source/Control: Y00GT - Combustion

Design Capacity: 476 million Btu per hour

Emission Source/Control: Y00SI - Control

Control Type: STEAM OR WATER INJECTION



Item 52.2:

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

Emission Unit: Y-00001
Process: 006 Source Classification Code: 2-01-002-01
Process Description:
This process consists of a GE Frame 6 gas turbine firing on natural gas without the duct burner firing.

Emission Source/Control: Y00GT - Combustion
Design Capacity: 476 million Btu per hour

Emission Source/Control: Y00SI - Control
Control Type: STEAM OR WATER INJECTION

Item 52.3:

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

Emission Unit: Y-00001
Process: 007 Source Classification Code: 2-01-001-01
Process Description:
This process consists of a GE Frame 6 gas turbine firing on Number 2 distillate oil with or without the duct burner firing.

Emission Source/Control: Y00DB - Combustion
Design Capacity: 30 million Btu per hour

Emission Source/Control: Y00GT - Combustion
Design Capacity: 476 million Btu per hour

Emission Source/Control: Y00SI - Control
Control Type: STEAM OR WATER INJECTION

Item 52.4:

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

Emission Unit: Y-00001
Process: 009 Source Classification Code: 2-02-002-03
Process Description:
This process consists of a GE Frame 6 gas turbine and duct burner firing on natural gas.

Emission Source/Control: Y00DB - Combustion
Design Capacity: 30 million Btu per hour

Emission Source/Control: Y00GT - Combustion
Design Capacity: 476 million Btu per hour

Emission Source/Control: Y00SI - Control
Control Type: STEAM OR WATER INJECTION

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Item 52.5:

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

Emission Unit: Y-00002

Process: 010

Source Classification Code: 1-02-006-02

Process Description:

This process consists of the auxiliary boiler burning natural gas. Flue Gas Recirculation is used to control NOx emissions.

Emission Source/Control: Y0AUX - Combustion

Design Capacity: 99 million Btu per hour

Emission Source/Control: Y0FGR - Control

Control Type: FLUE GAS RECIRCULATION

Item 52.6:

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

Emission Unit: Y-00002

Process: 011

Source Classification Code: 1-02-005-02

Process Description:

This process consists of the auxiliary boiler burning Number 2 distillate oil. Flue Gas Recirculation is used to control NOx emissions.

Emission Source/Control: Y0AUX - Combustion

Design Capacity: 99 million Btu per hour

Emission Source/Control: Y0FGR - Control

Control Type: FLUE GAS RECIRCULATION

Condition 53: CEM Reports

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 53.1:

This Condition applies to Emission Unit: Y-00001

Item 53.2:

Indeck shall submit a quarterly written CEM report to NYSDEC for every calendar year quarter. All quarterly reports shall be post marked by the 30th day following the end of each calendar quarter and shall include:

(i) a summary of excess emissions and CEMS down time reported in the format specified in Appendix C of the Title V permit, 40 CFR 60.7(d) or equivalent;

(ii) the results of the quarterly monitoring performance audit, reported in the format of 40 CFR 60 Appendix F (or equivalent);



(iii) excess emissions shall be identified as any one-hour block period during which the average emissions of NO_x or CO, as measured by the CEM system, exceeds the corresponding mass or concentration emission limits set forth in this permit; and

(iv) for the purposes of this permit, excess emissions indicated by the CEM system for one hour block periods other than start-ups and shutdowns, malfunctions (as stated in 6NYCRR Subpart 201-1.4) and CEM calibrations may be considered violations of the applicable emission limits.

Condition 54: Gas Turbine Output as a Function of Temperature and Load Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 54.1:

This Condition applies to Emission Unit: Y-00001

Item 54.2:

The gas turbine output in kilowatts (KW) which corresponds to the ambient temperature and percent load shall be derived from Figure 5, contained in Appendix A of the Title V permit. The figure depicts the output of the gas turbine in KW as a function of temperature in degrees F for 80% and 100% loads.

Condition 55: Compliance Certification Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 55.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 55.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Facility is subject to Best Available Control Technology (BACT) requirements under 40CFR52.21 (PSD) for particulate matter (PM). A PSD BACT determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM. The PSD emission limit (based on HHV of fuel) for PM of 0.007 lb/mmBTU for applies to the gas turbine firing on natural gas with or without the duct burner firing (Process 006

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and Process 009) at all allowable loads, where initial stack testing was required for compliance. USEPA Test Method 5, contained in 40CFR60, Appendix A, shall be utilized for the determination of in-stack PM emissions. Additional stack testing may be required to verify compliance and shall be conducted upon request.

Upper Permit Limit: 0.007 pounds per million Btus
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 56: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 56.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 56.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The Facility is subject to BACT requirements under 40CFR52.21 (PSD) for particulate matter (PM). A PSD BACT determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM. This yielded a PSD mass emission limit for PM of 17 lb/hr and applies to all loads greater than the minimum allowable load of 80% power output for the gas turbine firing on No. 2 fuel oil with the duct burner firing (Process 007), where initial stack testing was required for compliance. USEPA Test Method 5, contained in 40CFR60, Appendix A, shall be utilized for the determination of in-stack PM emissions. Additional stack testing may be required to verify compliance and shall be conducted upon request.

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Upper Permit Limit: 17 pounds per hour
Reference Test Method: USEPA Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 57: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 57.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 57.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:

During periods of water washing, CO emissions from the gas turbine and maximum in-stack CO emissions from the gas turbine with or without the duct burner shall not exceed 40 ppm. The duration of each water wash shall not exceed 2 hours.

The CEMS shall meet the requirements specified in the Facility CEMS Monitoring and QA Plans which are based on 40CFR60 Appendix B and Appendix F, the NESCAUM Guidance for CEMS (9/90) and the NYSDEC Air Guide No. 34. Performance Specification No. 4 (PS-4) contained in 40CFR60 Appendix B shall be used to evaluate the CO CEMS. Procedure 1 (P-1) contained in 40CFR60 Appendix F shall be used to evaluate the effectiveness of Quality Control and Quality Assurance procedures and the quality of data produced by the CEMS to determine compliance with this limit for CO.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 601P

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 40 parts per million by volume (dry,
corrected to 15% O₂)

Reference Test Method: USEPA Method 10

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Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 3 calendar month(s).

Condition 58: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 58.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

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

Item 58.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOX EMISSIONS LIMIT FOR PERIODS OF STARTUP or SHUTDOWN OF THE GAS TURBINE WHILE FIRING NATURAL GAS (Process 006 and Process 009):

The original PSD permit provided a three hour period during which startup or shutdown of the stationary gas turbine could occur without enforcement of the normal operating emission limits for NOx. During these periods of thermal instability, compliance with the NOx limits established under PSD was technologically infeasible. The stationary gas turbine requires up to three hours of operation before thermal stability is obtained and NOx emissions can be reduced via steam injection. During shutdown there may also be limited steam available for steam injection to control NOx. The NOx mass emission limit specified in this condition has been established for the stationary gas turbine during periods of start-up and shutdown, only.

1.) Firing natural gas, the combustion gas turbine shall not emit more than 501 pounds of NOx during a startup or shutdown period. Startup and shutdown periods shall not exceed 180 minutes (three hours). A startup period begins when the combustion process is initiated from shutdown status and continues until the lowest allowable operating load is attained and the steam injection system is fully operational and able to meet NOx emission limits. A

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shutdown period begins when the unit goes below the lowest level of stable operation and continues until the fuel supply is completely turned off.

2.) The hourly emissions for any partial hour after the end of the startup period or before a shutdown period, will be calculated following the procedures in 40CFR Part 60, where there must be at least one minute of data outside the startup or shutdown period to be a valid 15-minute period. The calculated hourly average must comply with the normal operating emission limits.

3.) The total emissions from each startup and shutdown period shall be recorded. Data recording should be adjusted to reflect the CEM response time.

4.) CEM calibrations shall be avoided during the startup or shutdown periods when feasible.

5.) Any occurrence of excess emissions shall be reported to the Department promptly and shall include the cause, the corrective action taken and the actual mass emissions. This information shall also be included in the semi-annual compliance report.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 501 pounds

Reference Test Method: 40 CFR Part 60, Appendix B, PS 2

Monitoring Frequency: CONTINUOUS

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED PER OCCURRENCE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 59: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 59.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

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

Item 59.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOX EMISSIONS LIMIT FOR PERIODS OF STARTUP or SHUTDOWN OF THE GAS TURBINE (GT) WHILE FIRING FUEL OIL (Process 007):

The original PSD permit provided a three hour period during which startup or shutdown of the stationary gas turbine could occur without enforcement of the normal operating emission limits for NOx. During these periods of thermal instability, compliance with the NOx limits established under PSD was technologically infeasible. The stationary gas turbine requires up to three hours of operation to generate steam via the Heat Recovery Steam Generator for injection into the GT to control NOx formation. During shutdown there may also be limited steam available for steam injection to control NOx. The NOx mass emissions limit specified in this condition has been established for the stationary gas turbine during periods of start-up and shutdown, only.

- 1.) Firing fuel oil, the combustion gas turbine shall not emit more than 484 pounds of NOx during a startup or shutdown period. Startup and shutdown periods shall not exceed 180 minutes (three hours). A startup period begins when the combustion process is initiated from shutdown status and continues until the lowest allowable operating load is attained and the steam injection system is fully operational and able to meet NOx emission limits. A shutdown period begins when the unit goes below the lowest level of stable operation and continues until the fuel supply is completely turned off.
- 2.) The hourly emissions for any partial hour after the end of a startup period or before a shutdown period, will be calculated following the procedures in 40CFR Part 60, where there must be at least one minute of data outside the startup or shutdown period to be a valid 15-minute period. The calculated hourly average must comply with the normal operating emission limits.
- 3.) The total emissions from each startup and shutdown period shall be recorded. Data recording should be adjusted to reflect the CEM response time.
- 4.) CEM calibrations shall be avoided during the startup or shutdown periods when feasible.
- 5.) Any occurrence of excess emissions shall be reported to the Department promptly and shall include the cause, the corrective action taken and the actual mass emissions.

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This information shall also be included in the semi-annual compliance report.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD
Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 484 pounds

Reference Test Method: 40 CFR Part 60, Appendix B, PS 2

Monitoring Frequency: CONTINUOUS

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED PER OCCURRENCE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 60: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

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

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility shall operate and maintain a CEMS to measure and record NO_x emissions and to demonstrate compliance with the 42ppmv NO_x limit. This emission limit for NO_x applies to in-stack emissions for all operating loads equal to or greater than 24 MW power output for the gas turbine and the gas turbine/duct burner firing on natural gas (Processes 006 and 009, respectively). The CEMS shall be maintained and operated in accordance with the approved Facility CEMS Monitoring & QA Plans which are based on 40CFR60 Appendix B (Performance Specifications) & Appendix F (Quality Assurance Procedures), the NESCAUM Guidance for CEMS (9/90), and the NYSDEC Air Guide No. 34. Performance Specification No. 2 (PS-2) contained in 40CFR60 Appendix B shall be used to evaluate the NO_x CEMS. Procedure 1 (P-1) contained in 40CFR60 Appendix F shall be used to evaluate the effectiveness of Quality Control and Quality Assurance procedures and the quality of data produced by the CEMS to determine compliance with this

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limit for NOx. Compliance with this limit also satisfies the requirements for 6NYCRR227-2.4(e)(2)(i), NOx RACT, which specifies an equivalent limit for NOx.

The stationary gas turbine is also subject to NSPS 40 CFR 60 Subpart GG in addition to the limit in Prevention of Significant Deterioration (PSD). The PSD limits of 42 ppmv a for natural gas (dry, corrected to 15% O₂) is more restrictive than the 75 ppm limit in Subpart GG. However, the facility must comply with both Subpart GG and PSD limits.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 42 parts per million by volume (dry, corrected to 15% O₂)

Reference Test Method: USEPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 61: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 61.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

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

Item 61.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility shall operate and maintain a CEMS to measure and record NOx emissions and to demonstrate compliance with the 65 ppmv NOx limit. This emission limit for NOx applies to the minimum allowable load (80% power output) and full load (100% power output) for the turbine firing on No. 2 oil (Process 007) and a combination of natural gas and No. 2 oil (Process 005). The CEMS shall be maintained and operated in accordance with the current approved Facility CEMS Monitoring & QA Plans which are

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based on 40CFR60 Appendix B & Appendix F, the NESCAUM Guidance for CEMS (9/90), and the NYSDEC Air Guide No. 34. Performance Specification No. 2 (PS-2) contained in 40CFR60 Appendix B shall be used to evaluate the NOx CEMS. Procedure 1 (P-1) contained in 40CFR60 Appendix F shall be used to evaluate the effectiveness of Quality Control and Quality Assurance procedures and the quality of data produced by the CEMS to determine compliance with this limit for NOx. Compliance with this limit also satisfies the requirements for 6NYCRR227-2.4(e)(2)(ii), NOx RACT, which specifies an equivalent limit for NOx.

The stationary gas turbine is also subject to NSPS 40 CFR 60 Subpart GG in addition to the limit in Prevention of Significant Deterioration (PSD). The PSD limits of 65 ppmv for No. 2 fuel oil, (dry, corrected to 15% O₂) is more restrictive than the 75 ppm limit in Subpart GG. However, the facility must comply with both Subpart GG and PSD limits.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 65.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: USEPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 62: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 62.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 62.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

During periods of water washing, CO emissions from the

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gas turbine and maximum in-stack CO emissions from the gas turbine/duct burner shall not exceed 40 lb/hr. The duration of each water wash shall not exceed 2 hours. The mass emission rate (lb/hr) of CO shall be calculated continuously in accordance with the Facility CEMS Monitoring and QA Plans. The calculated mass emission rate and the combustion inlet air temperature shall be used to determine compliance with the mass emission limit.

The CEMS shall meet the requirements specified in the Facility CEMS Monitoring and QA Plans which are based on 40CFR60 Appendix B and Appendix F, the NESCAUM Guidance for CEMS (9/90) and the NYSDEC Air Guide No. 34. Performance Specification No. 4 (PS-4) contained in 40CFR60 Appendix B shall be used to evaluate the CO CEMS. Procedure 1 (P-1) contained in 40CFR60 Appendix F shall be used to evaluate the effectiveness of Quality Control and Quality Assurance procedures and the quality of data produced by the CEMS to determine compliance with this limit for CO.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 601P

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 40 pounds per hour

Reference Test Method: USEPA Method 10

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 63: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 63.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 63.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This 0.038 pounds per million Btus emission limit for PM-10 (based on HHV of fuel), from the original PSD



permit, applies at all ambient temperatures for all operating loads between 24 MW and 42 MW maximum power output for Processes 006 and 009 and between 80% and 100% power output for Process 007.

Actual and estimated mass emission rates of PM-10 from Process 009 (turbine and duct burner firing on natural gas) derived from stack test data (EPA Method 202 combined with Method 201/201A) and the GE Gas Turbine Performance Estimator for High, Mid and Low loads each at 0, 40 and 100 degrees Fahrenheit (F) were modeled using SCREEN3. Based on the results of the SCREEN3 analysis, it was determined that the the maximum emission rate of total PM-10 at 12.8 lb/hr resulted in a maximum 24-hour concentration of total PM-10 at 1.43 ug/m³ and an annual concentration of 0.29 ug/m³. These concentrations are well below the Significant Impact Levels (SILs) (24 hr: 5 ug/m³ and annual: 1 ug/m³) and the National Ambient Air Quality Standards (NAAQS) (24 hr: 150 ug/m³ and annual: 50 ug/m³) for total PM-10 for both the 24-hour and the annual averaging periods (See Air Quality Modeling Analysis of Turbine Generator at Low-Load, prepared by Epsilon Associates, Inc., May 16, 2001). The maximum emission rate based on heat input determined for all loads and temperatures for Process 009 was 0.029 lb/mmBTU.

A stack test of the PM-10 emissions from the gas turbine while firing No. 2 oil (Process 007 with the duct burner firing) showed an average total PM-10 emission rate of 5.3 lb/hr (See Test Report for PM-10 Emissions from a GE Frame 6 while firing Fuel Oil, Indeck-Yerkes Tonawanda Energy Center, prepared by Nicholson Environmental, Inc., December 10, 2004) at 100 % load and average temperature of 52.2 degrees F. The average emission rate for Process 007 at 100% load and 52.2 degrees F was determined to be 0.012 lb/mmBTU.

Since the maximum estimated 24-hour and annual concentrations of total PM-10 are well below the SILs and NAAQS for total PM-10 for all processes, it was determined that the emission rate limit for Processes 006 and 009 could safely be adjusted to 0.038 lbs PM-10/mmBTU. The filterable PM-10 limits specified in the original PSD permit were 0.0053 lb/mmBTU at 80% load and 0.007 lb/mmBTU at 100% load. The filterable PM-10 limit of 0.038lb/mmBTU specified in the original PSD permit for Process 007 will remain the same for total PM-10.

Parameter Monitored: PM-10

Upper Permit Limit: 0.038 pounds per million Btus

Reference Test Method: 40CFR51, Appendix M

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



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DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 64: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 64.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 64.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility shall operate and maintain a CEMS to measure and record CO emissions and to demonstrate compliance with the 10 ppm CO limit. This emission limit for CO applies to the all operating loads between 24 MW and 42 MW maximum power output for Processes 006 and 009 and between 80% and 100% power output for Processes 005 and 007. The CEMS shall meet the requirements specified in the Facility CEMS Monitoring and QA Plan. Performance Specification No. 4 (PS-4) contained in 40CFR60 Appendix B shall be used to evaluate the CO CEMS. Procedure 1 (P-1) contained in 40CFR60 Appendix F shall be used to evaluate the effectiveness of Quality Control and Quality Assurance procedures and the quality of data produced by the CEMS to determine compliance with this limit for CO.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 601P

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 10 parts per million by volume (dry,
corrected to 15% O₂)

Reference Test Method: USEPA Method 10

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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Subsequent reports are due every 3 calendar month(s).

Condition 65: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 65.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 65.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Facility is subject to BACT requirements under 40CFR52.21 (PSD) for particulate matter (PM). A PSD BACT determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM. This PSD emission limit for PM of 0.038 lb/mmBTU (based on HHV of fuel) applies to the all loads greater than the minimum allowable load of 80% power output for the gas turbine firing on No. 2 fuel oil without the duct burner firing (Process 007), where initial stack testing was required for compliance. The mass emission rate limit for PM for Process 007 is 17 lb/hr. USEPA Test Method 5, contained in 40CFR60, Appendix A, shall be utilized for the determination of in-stack PM emissions. Additional stack testing may be required to verify compliance and shall be conducted upon request.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.038 pounds per million Btus

Reference Test Method: USEPA METHOD 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 66: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021



Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 66.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The Facility demonstrated compliance with emission limits for NOx and CO at 24 MW, 30 MW and 41 MW output for the gas turbine and duct burner firing on natural gas (Process 009) in a stack test conducted March 21-23, 2001.

Therefore, the gas turbine shall never be operated below 24 MW output for Process 006 and Process 009.

Indeck-Yerkes must track power output continuously to verify compliance with the minimum allowable power output of 24MW. Daily records must be maintained on-site for five years. Annual Certification and Deviation Reports must be submitted annually and semiannually, respectively.

Parameter Monitored: ELECTRICAL OUTPUT

Lower Permit Limit: 24 megawatt

Monitoring Frequency: CONTINUOUS

Averaging Method: MINIMUM-NOT TO FALL BELOW EXCEPT
DURING STARTUP/SHUTDOWN

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 67: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 67.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE



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

Item 67.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The Facility has demonstrated compliance only at loads generating 80% and 100% power output while firing No. 2 fuel oil in the gas turbine. Therefore, the gas turbine shall never be operated below 80% power output for Process 007 (firing of No. 2 fuel oil in the Gas Turbine) and Process 005 (co-firing of natural gas and No. 2 fuel oil in the Gas Turbine). Indeck-Yerkes must track power output continuously to verify compliance with the minimum allowable operating capacity of 80% load. Figure 5 in Appendix A shall be used to verify compliance with this limit at all temperatures and power outputs. Daily records must be maintained on-site for five years and reporting must be conducted semi-annually and annually.

Parameter Monitored: ELECTRICAL LOAD OUTPUT

Lower Permit Limit: 80 percent

Upper Permit Limit: 100 percent

Monitoring Frequency: CONTINUOUS

Averaging Method: RANGE-NOT TO FALL OUTSIDE OF STATED
RANGE EXCEPT DURING STARTUP/SHUTDOWN

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 68: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 68.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 68.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Facility is subject to Best Available Control

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Technology (BACT) requirements under 40CFR52.21 (PSD) for particulate matter (PM). A PSD BACT determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM. The PSD mass emission limit of 2.5 lb/hr for PM applies to the gas turbine firing on natural gas with or without the duct burner firing (Process 006 and Process 009) at all allowable outputs, where initial stack testing was required for compliance. These processes are also subject to the PSD emission limit (based on HHV of fuel) for PM of 0.007 lb/mmBTU at all allowable loads.

USEPA Test Method 5, contained in 40CFR60, Appendix A, shall be utilized for the determination of in-stack PM emissions. Additional stack testing may be required to verify compliance and shall be conducted upon request.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 2.5 pounds per hour
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 69: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 69.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 69.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
The mass emission rate limit of 12.8 lbs/hr for total (filterable + condensable) particulate matter less than 10



microns (PM-10) was established under 40CFR52.21, Prevention of significant deterioration of air quality (PSD). A PSD Best Available Control Technology (BACT) determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM-10. This PSD emission limit for total PM-10 applies to the gas turbine (with (Process 009) or without (Process 006) the duct burner) while firing natural gas at all combustion inlet air temperatures and power outputs equal to and greater than 24 MW.

The original PSD permit contained a single emission limit of 2.5 lbs/hr and 2.6 lb/hr for particulate matter (PM) and PM-10 from Process 006 and Process 009, respectively. The limit for PM-10 pertained to the filterable portion of PM-10 only and was based on in-stack performance data for the gas turbine provided by General Electric using Method 201 or 201A. Since that permit was issued, NYSDEC policy regarding test methods for measuring PM-10 has changed. The old method (EPA Method 201 or 201A) counted filterable PM-10, but did not count condensable particulate matter. The new method (EPA Method 202 combined with Method 201 or 201A) measures both of these contaminants added together to get total PM-10.

To update PM-10 emissions to include both the filterable and condensable portions (total PM-10), a stack test on in-stack emissions from Process 009 was conducted on March 21-23, 2001 to determine the mass emission rate of total PM-10 using Method 201A and Method 202 (see Emission Test Report, Indeck-Yerkes Energy Center, prepared by E3-Killam, Inc., May 11, 2001). Actual and estimated mass emission rates of PM-10 from Process 009 (turbine and duct burner firing on natural gas) derived from stack test data and the GE Gas Turbine Performance Estimator for High, Mid and Low loads each at 0, 40 and 100 degrees Fahrenheit (F) showed that the maximum mass emission rate of 12.8 lbs/hr for total PM-10 occurred at high load and 0 degrees Fahrenheit. The corresponding emission rate for filterable PM-10 was 2.6 lb/hr.

In accordance with NYSDEC Policy: Regulation and Verification of Particulate Matter and PM-10 Emissions, the 2007 permit renewal was adjusted to account for the condensable emissions that have always been present but were not previously measured. The permit limit of 12.8 lb/hr is the sum of the old limit plus the amount of condensable determined from the emission test of the facility performed in March 2001 and the GE Gas Turbine Performance Estimator. This does not reflect a loosening

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of PM-10 limit just a change in the way PM-10 is measured.

Since the total PM-10 emissions were determined from one stack test, under specific conditions, a future stack test under different conditions may result in a different mass emission rate. If emissions in excess of 12.8 pounds per hour are measured in subsequent stack tests, the permittee shall rely on air quality modeling analyses to determine if a significant impact has occurred. Additional stack testing may be required to verify compliance in the future and shall be conducted upon request. Test Methods 201 or 201A and 202, contained in 40CFR51, Appendix M, shall be utilized for the determination of in-stack total (filterable + condensable) PM-10 emissions.

Parameter Monitored: PM-10

Upper Permit Limit: 12.8 pounds per hour

Reference Test Method: 40CFR51, Appendix M, USEPA Method 201/201A/202

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 70: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 70.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 000630-08-0	CARBON MONOXIDE
CAS No: 0NY210-00-0	OXIDES OF NITROGEN

Item 70.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To determine the mass emission rate limit at the current combustion inlet temperature for NO_x, the facility shall utilize the graphs shown in Figures 3 & 4 in Appendix A of the Title V permit for the turbine firing on No. 2 fuel (Process 007 and Process 005). These graphs illustrate

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the temperature dependency of the mass emission rate limits for NO_x at minimum (80% power output) and full (100% power output) loads for the turbine. The graphs were generated based on manufacturer's guarantees from General Electric for the turbine. Linear interpolation of these graphs at current combustion inlet temperature shall be utilized to determine the mass emission rate limits for loads operating between the minimum and full loads for Process 007 and Process 005.

Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 71: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 71.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Item 71.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The CEMS shall be audited at least once each calendar quarter in accordance with 40CFR60, Appendix B and Appendix F. Successive quarterly audits shall occur no closer than 2 months. A Relative Accuracy Test Audit (RATA) must be conducted at least once every four calendar quarters. A Cylinder Gas Audit (CGA) may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

Reference Test Method: PS-2, PS-4, P-1
Monitoring Frequency: QUARTERLY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 3 calendar month(s).

Condition 72: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

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Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

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

Item 72.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility shall operate and maintain a CEMS to measure and record NOx emissions and to demonstrate compliance with the NOx limit. Actual and estimated mass emission rates of NOx for Process 009 at 41 MW, 30 MW and 24 MW power outputs were modeled at 0, 40 and 100 degrees Fahrenheit. Refined ISCST3 modeling results showed that the predicted maximum annual concentration of NO2 (41 MW, 0 degree Fahrenheit) is 0.41 ug/m3, which is below the Significant Impact Level of 1 ug NO2/m3 and the National Ambient Air Quality Standard (NAAQS) of 100 ug NO2/m3 for an annual averaging period (See Air Quality Modeling Analysis of Turbine Generator at Low-Load, prepared by Epsilon Associates, Inc., May 16, 2001). Based on these results, the in-stack mass emission rates from both Process 006 and Process 009 shall not exceed 88 lb/hr of NOx for operating loads equal to or greater than 24 MW at any combustion inlet air temperature. Mass emission rates of NOx shall be determined in accordance with the Acid Rain and Subpart H NOx Emissions Monitoring Plan (December 2001) for Indeck-Yerkes.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 88 pounds per hour

Reference Test Method: Reference Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 73: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 73.1:

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The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: ONY075-00-5 PM-10

Item 73.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The mass emission rate limit for total (filterable + condensable) particulate matter less than 10 microns (PM-10) established under 40CFR52.21, Prevention of significant deterioration of air quality (PSD) is 21.5 lbs/hr. A PSD Best Available Control Technology (BACT) determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM-10. This PSD emission limit for total PM-10 applies to the gas turbine firing No. 2 fuel oil (with or without the duct burner firing) at all ambient temperatures and loads equal to and greater than 80%.

The original PSD permit contained a single emission limit for particulate matter (PM) and PM-10 of 17 lbs/hr at base load (100% power output) and 15 lbs/hr at the minimum allowable load (80% power output) for the gas turbine firing on No. 2 fuel oil without the duct burner firing (Process 007). The limit for PM-10 pertained to the filterable portion of PM-10 only and was based on in stack performance data for the gas turbine provided by General Electric using Method 201 or 201A. Since that permit was issued, NYSDEC policy regarding test methods for measuring PM-10 has changed. The old method (EPA Method 201 or 201A) counted filterable PM-10, but did not count condensible particulate matter. The new method (EPA Method 202 combined with Method 201 or 201A) measures both of these contaminants added together to get total PM-10.

To update PM-10 emissions to include both the filterable and condensible portions (total PM-10), a stack test on in-stack emissions from Process 007 (with the duct burner firing) was conducted on November 17, 2004 to determine the mass emission rate of total PM-10 using Method 201A and Method 202 (See Test Report for PM-10 Emissions from a GE Frame 6 while firing Fuel Oil, Indeck-Yerkes Tonawanda Energy Center, prepared by Nicholson Environmental, Inc., December 10, 2004). Stack test results showed that the maximum mass emission rate of

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filterable PM-10 at an average maximum load of 38.6 MW and 52.2 degrees Fahrenheit was 0.8 lbs/hr and the condensible portion of PM-10 was 4.5 lb/hr

In accordance with NYSDEC Policy: Regulation and Verification of Particulate Matter and PM-10 Emissions, the new permit is being adjusted to account for the condensible emissions that have always been present but were not previously measured. The new permit limit is the sum of the old limit (17 lbs/hr) plus the amount of condensibles (4.5 lbs/hr) found in an emission test of the facility performed in November 2004. This does not reflect a loosening of PM-10 limit just a change in the way PM-10 is measured.

Since the total PM-10 emissions were determined from one stack test, under specific conditions, a future stack test under different conditions may result in a different mass emission rate. If emissions in excess of 21.5 pounds per hour are measured in subsequent stack tests, the permittee shall rely on air quality modeling analyses to determine if a significant impact has occurred. Additional stack testing may be required to verify compliance in the future and shall be conducted upon request. Test Methods 201 or 201A and 202, contained in 40CFR51, Appendix M, shall be utilized for the determination of in-stack total (filterable + condensible) PM-10 emissions.

Parameter Monitored: PM-10

Upper Permit Limit: 21.5 pounds per hour

Reference Test Method: USEPA 201/201A/202

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 74: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 74.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

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Item 74.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The 15 lbs/hr CO limit while firing natural gas was determined from Actual and estimated mass emission rates of CO for Process 009 (turbine and duct burner firing on natural gas) were determined for High, Mid and Low loads at 0, 40 and 100 degrees Fahrenheit using stack test data and the GE Gas Turbine Performance Estimator. The maximum mass emission rate of 13 lb CO/hr occurred at high load (100%) and 0 degrees Fahrenheit (See Air Quality Modeling Analysis of Turbine Generator at Low-Load, prepared by Epsilon Associates, Inc., May 16, 2001). Using the maximum mass emission rate for CO, a SCREEN3 Analysis showed maximum 1-hour and 8-hour concentrations of CO at 3.58 ug/m³ and 2.62 ug/m³, respectively. For averaging periods of 1-hour and 8-hours, the Significant Impact Levels (SILs) for CO are 2000 ug/m³ and 500 ug/m³, respectively and the National Ambient Air Quality Standards (NAAQS) are 40,000 ug/m³ and 10,000 ug/m³, respectively. Since the maximum estimated 1-hour and 8-hour concentrations of CO at the maximum emission rate of CO are well below the SILs and NAAQS for CO, it was determined that the mass emission rate limit could safely be increased to 15 lbs CO/hr. This emission limit for CO applies at all ambient temperatures for all operating loads between 24 MW and 42 MW maximum power output for Processes 006 and 009 and between 80% and 100% power output for Processes 005 and 007. The mass emission rates of CO for all processes and ambient temperatures shall be determined in accordance with the current CEMS Quality Assurance Manual.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 601P

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 15 pounds per hour

Reference Test Method: USEPA Method 10

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 75: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 75.1:

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The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Item 75.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Combustion inlet air temperature must be continuously measured and recorded. Measurements must be accurate to within +/- 3 deg F.

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 76: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 76.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Item 76.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The total annual water washing occurrences for the GE Frame 6 gas turbine is limited to 2250 hours per year on a rolling daily basis.

Annual hour use rolled daily shall be reported in the quarterly reports.

Work Practice Type: HOURS PER YEAR OPERATION

Upper Permit Limit: 2250 hours per year

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL TOTAL ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

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Condition 77: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 77.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Item 77.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The gas turbine shall only fire natural gas, No. 2 fuel oil or a combination of both. The duct burner shall only fire natural gas. The type and amount of fuel burned in the gas turbine and duct burner must be monitored and recorded. Data must be accurate to within +/- 5%.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 78: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 78.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

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

Item 78.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility shall operate and maintain a CEMS to measure and record NOx emissions and to demonstrate compliance with the 119 pound per hour NOx limit. This emission limit for NOx applies to loads equal to or greater than 80% power output for the turbine firing on No. 2 oil (Process 007) or a combination of natural gas and No. 2 oil (Process 005). Mass emission rates of NOx shall be

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determined in accordance with the Acid Rain and Subpart H NOx Emissions Monitoring Plan (December 2001) for Indeck-Yerkes. The mass emission rate limit of 119 lb NOx/hr specified in this condition is for 100% load with a combustion inlet air temperature of 48 degrees Fahrenheit, only. The calculated mass emission rates and the the corresponding combustion inlet air temperatures shall be used to determine compliance with the applicable mass emission limits specified in Figure 3 (80% power output) and Figure 4 (100% power output) in Appendix A of the Title V permit. Linear interpolation of these graphs at current combustion inlet air temperature shall be utilized to determine the mass emission rate limits for all other allowable loads. Mass emission rates of NOx shall be determined in accordance with the Acid Rain and Subpart H NOx Emissions Monitoring Plan (December 2001) for Indeck-Yerkes.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 119 pounds per hour

Reference Test Method: USEPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 79: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 79.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 79.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

CO EMISSIONS LIMIT FOR PERIODS OF STARTUP or SHUTDOWN OF THE GAS TURBINE (GT) WHILE FIRING NATURAL GAS (Process 006 and Process 009):

The original PSD permit provided a three hour period



during which startup or shutdown of the stationary gas turbine could occur without enforcement of the normal operating emission limits for CO. During these periods of thermal instability, compliance with the CO limits established under PSD was technologically infeasible. The stationary gas turbine requires up to three hours of operation before thermal stability and combustion efficiency are obtained and CO emissions are reduced. During shutdown there may also be unstable combustion which generates CO emissions in excess of the established limits. The CO mass emission limit specified in this condition has been established for the stationary gas turbine during periods of start-up and shutdown, only.

- 1.) Firing natural gas, the combustion gas turbine shall not emit more than 407 pounds of CO during a startup or shutdown period. Startup and shutdown periods shall not exceed 180 minutes (three hours). A startup period begins when the combustion process is initiated from shutdown status and continues until the lowest allowable operating load is attained and the CO emissions meet the CO emission limits. A shutdown period begins when the unit goes below the lowest level of stable operation and continues until the fuel supply is completely turned off.
- 2.) The hourly emissions for any partial hour after the end of the startup period or before a shutdown period, will be calculated following the procedures in 40CFR Part 60, where there must be at least one minute of data outside the startup or shutdown period to be a valid 15-minute period. The calculated hourly average must comply with the normal operating emission limits.
- 3.) The total emissions from each startup and shutdown period shall be recorded. Data recording should be adjusted to reflect the CEM response time.
- 4.) CEM calibrations shall be avoided during the startup or shutdown periods when feasible.
- 5.) Any occurrence of excess emissions shall be reported to the Department promptly and shall include the cause, the corrective action taken and the actual mass emissions. This information shall also be included in the semi-annual compliance report.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 601P

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 407 pounds

Reference Test Method: 40 CFR Part 60, Appendix B, PS 4A

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Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED PER OCCURRENCE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 80: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 80.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 80.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

CO EMISSIONS LIMIT FOR PERIODS OF STARTUP or SHUTDOWN OF THE GAS TURBINE (GT) WHILE FIRING FUEL OIL (Process 007):

The original PSD permit provided a three hour period during which startup or shutdown of the stationary gas turbine could occur without enforcement of the normal operating emission limits for CO. It takes up to three hours of operation for the GT to reach efficient combustion and the CO emissions are reduced. During shutdown there may be unstable combustion which generates CO emissions. During these periods of thermal instability, compliance with the CO limits established under PSD was technologically infeasible. The stationary gas turbine requires up to three hours of operation before thermal stability and combustion efficiency are obtained and CO emissions are reduced. During shutdown there may also be unstable combustion which generates CO emissions in excess of the established limits. The CO mass emission limit specified in this condition has been established for the stationary gas turbine during periods of start-up and shutdown, only.

1.) Firing fuel oil, the combustion gas turbine shall not emit more than 217 pounds of CO during a startup or shutdown period. Startup and shutdown periods shall not

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exceed 180 minutes (three hours). A startup period begins when the combustion process is initiated from shutdown status and continues until the lowest allowable operating load is attained and the CO emissions meet the CO emission limits. A shutdown period begins when the unit goes below the lowest level of stable operation and continues until the fuel supply is completely turned off.

2.) The hourly emissions for any partial hour after the end of the startup period or before a shutdown period, will be calculated following the procedures in 40CFR Part 60, where there must be at least one minute of data outside the startup or shutdown period to be a valid 15-minute period. The calculated hourly average must comply with the normal operating emission limits.

3.) The total emissions from each startup and shutdown period shall be recorded. Data recording should be adjusted to reflect the CEM response time.

4.) CEM calibrations shall be avoided during the startup or shutdown periods when feasible.

5.) Any occurrence of excess emissions shall be reported to the Department promptly and shall include the cause, the corrective action taken and the actual mass emissions. This information shall also be included in the semi-annual compliance report.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 601P

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 217 pounds

Reference Test Method: 40 CFR Part 60, Appendix B, PS 4A

Monitoring Frequency: CONTINUOUS

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED PER OCCURRENCE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 81: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 60.332(a)(1), NSPS Subpart GG

Item 81.1:

The Compliance Certification activity will be performed for:

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Regulated Contaminant(s):

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

Item 81.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of 75 ppm at 15 percent oxygen on a dry basis. The Indeck-Yerkes Energy Center operates a gas turbine (Processes 005, 006, 007, and 009, Emission Source Y00GT) equipped with steam injection (ES Y00SI) to control NOx emissions. A continuous emission monitor system (CEMS) in the gas turbine/duct burner exhaust stack is used to monitor NOx emissions from the gas turbine. A relative accuracy test audit of the CEMS is conducted annually.

The stationary gas turbine is also subject to Prevention of Significant Deterioration (PSD), 40 CFR Part 52. This limit of 75 ppm is less restrictive than the PSD NOx emission limits of 42 ppmv and 65 ppmv (dry, corrected to 15% O2) for the firing of natural gas and No. 2 fuel oil, respectively in the gas turbine. However, the facility must comply with both Subpart GG and PSD limits.

Manufacturer Name/Model Number: NOX- California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: NITROGEN OXIDE- (USE 0NY210-00-0)

Upper Permit Limit: 75 parts per million by volume (dry, corrected to 15% O2)

Reference Test Method: EPA Method 7E and either EPA Method 3 or 3A

Monitoring Frequency: CONTINUOUS

Averaging Method: 4-HOUR ROLLING AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 82: Exemption from NOx standard.

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.332(f), NSPS Subpart GG

Item 82.1:

This Condition applies to Emission Unit: Y-00001

Item 82.2:

Gas turbines using water or steam injection to

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control NOx are exempt from section 332.a
when ice fog is deemed a traffic hazard.

Condition 83: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.333(b), NSPS Subpart GG

Item 83.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 83.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

No owner or operator of a stationary gas turbine subject to 40CFR60 Subpart GG shall burn in that turbine any fuel which contains sulfur in excess of 0.8 percent by weight. The owner or operator shall monitor sulfur content of the fuel being fired in the turbine according to the frequency specified in 40CFR60.334(i).

The facility BACT limit of 0.3% sulfur by weight for fuel oil, established under 40CFR52.21(j), supersedes the limit of 0.8% sulfur by weight required under 40CFR60.333 for fuel oil fired in stationary gas turbine (Process 007).

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 0.8 percent by weight

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 84: CEMS
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.334(b), NSPS Subpart GG

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Item 84.1:

This Condition applies to Emission Unit: Y-00001

Item 84.2:

The owner or operator of any stationary gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which uses water or steam injection to control NOX emissions may, as an alternative to operating the continuous monitoring system described in paragraph (a) of this section, install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NOX and O2 monitors. As an alternative, a CO2 monitor may be used to adjust the measured NOX concentrations to 15 percent O2 by either converting the CO2 hourly averages to equivalent O2 concentrations using Equation F-14a or F-14b in appendix F to 40 CFR Part 75 and making the adjustments to 15 percent O2, or by using the CO2 readings directly to make the adjustments, as described in Method 20. If the option to use a CEMS is chosen, the CEMS shall be installed, certified, maintained and operated as specified in 40 CFR 60.334(b)(1), (2) and (3).

Condition 85: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.334(h)(1), NSPS Subpart GG

Item 85.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 85.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

h) The owner or operator of any stationary gas turbine subject to the provisions of this subpart:

(1) Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3) of this section. The sulfur content of the fuel must be determined using total sulfur methods described in §60.335(b)(10) (for liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see §60.17. The fuel analyses may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency).

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Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.8 percent by weight
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 86: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.334(h)(2), NSPS Subpart GG

Item 86.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Item 86.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Indeck-Yerkes is not required to monitor the nitrogen content of the fuel combusted in the turbine since they do not claim an allowance for fuel bound nitrogen to calculate the NO_x limit under 40CFR60.332 (1).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 87: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.334(h)(3), NSPS Subpart GG

Item 87.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):



CAS No: 007446-09-5 SULFUR DIOXIDE

Item 87.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

(i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

(ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

In accordance with Appendix D to Part 75, Section 2.3.2.4 (a)(2), Indeck-Yerkes submitted historical fuel sampling data for the previous 12 months documenting the total sulfur content and percentage by volume of methane in the natural gas used to fire the stationary gas turbine. The results of all sample analyses obtained by Indeck-Yerkes from January 2005 through January 2006 demonstrate that each sample result meets the definition of natural gas in 40CFR331(u). Certificates of Analysis for natural gas samples taken each month at the Indeck-Yerkes Plant show a total sulfur content of < 0.02 grains/100 scf, each and methane contents in the range of 93.95% to 96.01% by volume. In accordance with 40CFR60.331(u) natural gas must have a total sulfur content of 20.0 grains/100 scf or less and either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 British thermal units (Btu) per standard cubic foot. Since the fuel qualifies as natural gas based on fuel sampling and analysis, Indeck-Yerkes shall sample the fuel for total sulfur content at least annually (at least one sample must be taken in each calendar year) and



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when the fuel supply source changes.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 20 grains per 100 scf

Monitoring Frequency: MINIMUM - ONCE PER CALENDAR YEAR

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 88: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 60.334(i)(1), NSPS Subpart GG

Item 88.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 88.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

(i) The frequency of determining the sulfur content of
the fuel shall be as follows:

(1) Fuel oil. For fuel oil, use one of the total sulfur
sampling options and the associated sampling frequency
described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3
of appendix D to part 75 of this chapter (i.e., flow
proportional sampling, daily sampling, sampling from the
unit's storage tank after each addition of fuel to the
tank, or sampling each delivery prior to combining it with
fuel oil already in the intended storage tank).

In addition, this permit also contains a more stringent
sulfur requirements from Subpart 225-1: Fuel Composition
and Use - Sulfur Limitations. Subpart 225 restricts the
facility from burning #2 fuel oil (distillate) that has a
higher sulfur content than 0.0015 percent sulfur by weight
(15 ppm).

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Complying with the Subpart 225 limit of 15ppm also satisfies this condition.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.8 percent by weight
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 89: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 60.334(j), NSPS Subpart GG

Item 89.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Item 89.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

(j) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

(1) NITROGEN OXIDES.

(iii) For turbines using NOX and diluent CEMS:

(A) An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NOX concentration exceeds the applicable emission limit in §60.332(a)(1) or (2). For the purposes of this subpart, a 4-hour rolling average NOX concentration is the



arithmetic average of the average NOX concentration measured by the CEMS for a given hour (corrected to 15 percent O₂ and, if required under §60.335(b)(1), to ISO standard conditions) and the three unit operating hour average NOX concentrations immediately preceding that unit operating hour.

(B) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NOX concentration or diluent (or both).

(C) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period and (if the owner or operator has claimed an emission allowance for fuel bound nitrogen) the nitrogen content of the fuel during the period of excess emissions. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).

(2) SULFUR DIOXIDE. If the owner or operator is required to monitor the sulfur content of the fuel under paragraph (h) of this section:

(i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph (j)(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.

(iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor

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downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 90: Facility Subject to Title IV Acid Rain Regulations and Permitting
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40 CFR Part 72

Item 90.1:

This Condition applies to Emission Unit: Y-00001

Item 90.2:

This facility is subject to the Title IV Acid Rain Regulations found in 40 CFR Parts 72, 73, 75, 76, 77 and 78. The Acid Rain Permit is an attachment to this permit.

Condition 91: Multiple combustion sources.
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:6 NYCRR 227-1.2 (b)

Item 91.1:

This Condition applies to Emission Unit: Y-00001
Process: 007

Item 91.2:

The total heat input of all furnaces connected to the same stack or pollution control device shall be used to calculate the permissible particulate emission rate.

Condition 92: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 92.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001
Process: 005

Emission Point: 00001



Regulated Contaminant(s):

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

Item 92.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NO_x MASS EMISSION RATE LIMIT FOR THE CO-FIRING OF NATURAL GAS and NO. 2 FUEL OIL IN THE GAS TURBINE (PROCESS 005):

When co-firing natural gas and fuel oil in the gas turbine, the source may not exceed the emission limit as calculated below. This limit is based on the heat input corresponding to the higher heating value of each fuel burned. Since the Facility has demonstrated compliance only at loads generating 80% and 100% power output while firing No. 2 fuel oil in the gas turbine, the gas turbine shall never be operated below 80% power output for Process 005. The hourly emissions and the calculated limit must be recorded each hour. Any emissions above the limit should be reported following the requirements of 60.7(c) and submitted quarterly.

$$E = ((88 \text{ lb/hr} \times H_{ng}) + (E_o \times H_o)) / (H_{ng} + H_o)$$

where:

E is the nitrogen oxide (NO_x) limit in pounds per hour for the co-firing of natural gas and No. 2 fuel oil in the gas turbine.

88 lb/hr is the PSD mass emission rate limit for NO_x for the firing of natural gas in the gas turbine at all allowable loads and any combustion inlet air temperature (1-hour average).

H_{ng} is the heat input from natural gas during the hour, calculated using the higher heating value of the most recent natural gas analysis.

E_o is the PSD NO_x mass emission rate limit for the firing of No. 2 fuel oil in the gas turbine, which is dependent on load and combustion inlet air temperature (1-hour average). The NO_x mass emission rate limit at 100% load and 48 degrees Fahrenheit is 119 lb/hr. To determine the mass emission rate limit for the firing of No. 2 fuel oil in the gas turbine at the current combustion inlet air temperature (1-hour average) for either full (100%) or minimum (80%) loads, the facility shall utilize the graphs shown in Figures 3 & 4 in Appendix A of the Title V

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permit. Linear interpolation of these graphs at current combustion inlet air temperature (1-hour average) shall be utilized to determine the mass emission rate limits for loads operating between the minimum and full loads.

Ho is the heat input from fuel oil during the hour, based on the highest Gross Calorific Value (GCV) for the previous calendar year unless a higher sample value is obtained during the current calendar year, in accordance with 40CFR Part 75 App D, sec 2.2.

Indeck Yerkes must report on a quarterly basis if emissions stayed within pound per hour limit.

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 119 pounds per hour

Reference Test Method: 40 CFR Part 60, Appendix B, PS 2

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 93: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 93.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001

Emission Point: 00001

Process: 005

Regulated Contaminant(s):

CAS No: 0NY210-00-0

OXIDES OF NITROGEN

Item 93.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOx EMISSIONS LIMIT FOR THE CO-FIRING OF NATURAL GAS and NO. 2 FUEL OIL IN THE GAS TURBINE (PROCESS 005):

When co-firing natural gas and fuel oil in the gas turbine (Process 005), the source may not exceed the emission



limit as calculated below. This limit is based on the heat input corresponding to the higher heating value of each fuel burned. Since the Facility has demonstrated compliance only at loads generating 80% and 100% power output while firing No. 2 fuel oil in the gas turbine, the gas turbine shall never be operated below 80% power output for Process 005. The hourly emissions and the calculated limit must be recorded each hour. Any emissions above the limit should be reported following the requirements of 60.7(c) and submitted quarterly.

$$E = ((42 \text{ ppmv} \times H_{ng}) + (65 \text{ ppmv} \times H_o)) / (H_{ng} + H_o)$$

where:

E is the nitrogen oxide (NO_x) limit in parts per million by volume for the co-firing of natural gas and No. 2 fuel oil in the gas turbine.

42 ppmv is the PSD emission limit for NO_x for the firing of natural gas in the gas turbine at all allowable loads and any combustion inlet air temperature.

H_{ng} is the heat input from natural gas during the hour, calculated using the higher heating value of the most recent natural gas analysis.

65 ppmv is the PSD NO_x emission limit for the firing of No. 2 fuel oil in the gas turbine, at all allowable loads and any combustion inlet air temperature.

H_o is the heat input from fuel oil during the hour, based on the highest Gross Calorific Value (GCV) for the previous calendar year unless a higher sample value is obtained during the current calendar year, in accordance with 40CFR Part 75 App D, sec 2.2.

Facility shall report if emissions exceed or stay below the 65ppm NO_x limit

Manufacturer Name/Model Number: California Analytical Instruments (CAI), Model 600 CLD

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 65 parts per million by volume (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Part 60, Appendix B, PS 2

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).



Condition 94: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 94.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001 Emission Point: 00001
Process: 007

Item 94.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Distillate (No. 2) Fuel oil use in the gas turbine and auxiliary boiler is limited to 1440 hours per year each, calculated on a daily rolling basis. Records of hours of operation shall be maintained and made available for inspection upon request.

When the gas turbine co-fires natural gas and No. 2 fuel oil (Process 005), the hours operated on No. 2 oil shall be calculated as follows:

$$\text{Op Hrs} = (\text{Tot Op Hr} * \text{Ho}) / (\text{Ho} + \text{Hng})$$

where:

Op Hrs is the number of hours that is apportioned to the operation of the gas turbine on No. 2 oil during the co-firing of natural gas and No. 2 oil, which must be included in the daily rolling total of hours for fuel oil use.

Tot Op Hr is the total hours that the gas turbine co-fires natural gas and No. 2 oil per event, excluding shutdown periods.

Ho is the total heat input from fuel oil during the co-firing of natural gas and No. 2 fuel oil, based on the highest Gross Calorific Value (GCV) for the previous calendar year unless a higher sample value is obtained during the current calendar year, in accordance with 40CFR Part 75 App D, sec 2.2.

Hng is the total heat input from natural gas during the co-firing of natural gas and No. 2 fuel oil, calculated using the higher heating value of the most recent natural

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gas analysis.

The total rolling hours of operation must be submitted with each quarterly report.

Work Practice Type: HOURS PER YEAR OPERATION
Upper Permit Limit: 1440 hours per year
Monitoring Frequency: HOURLY
Averaging Method: ANNUAL TOTAL ROLLED DAILY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 3 calendar month(s).

Condition 95: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 95.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00001 Emission Point: 00001
Process: 009 Emission Source: Y00DB

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10
CAS No: 0NY075-00-0 PARTICULATES

Item 95.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Facility is subject to BACT requirements under 40CFR52.21 (PSD) for particulate matter (PM) and particulate matter less than 10 microns (PM-10). A PSD BACT determination conducted for the original operating permit resulted in the use of clean fuel, i.e. 75% natural gas and 25% No. 2 fuel oil, with no add-on control as BACT for PM and PM-10. This PSD emission limit of 0.005 lb/hr (based on HHV of fuel) is for both PM and PM-10 and applies to the duct burner firing on natural gas (Process 009, Emission Source Y00DB), where initial stack testing was required for compliance. The mass emission rate limit for this emission source for both PM and PM-10 is 0.1 lb/hr. USEPA Test Method 5, contained in 40CFR60, Appendix A, shall be utilized for the determination of in-stack PM emissions. Test Methods 201 or 201A and 202, contained in 40CFR51, Appendix M, shall be utilized for the determination of in-stack total (filterable + condensable) PM-10 emissions. Additional stack testing



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may be required to verify compliance and shall be conducted upon request.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.005 pounds per million Btus
Reference Test Method: METHOD 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 3 calendar month(s).

**Condition 96: Emission limits based on heat input
Effective between the dates of 11/08/2016 and 11/07/2021**

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 96.1:
This Condition applies to Emission Unit: Y-00002

Item 96.2:
All emission limits based on heat input shall correspond to the Higher Heating Value (HHV) of the fuel burned.

**Condition 97: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021**

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 97.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 97.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The mass emission rate limit for PM-10 for Process 010 and Process 011 is 11.3 lb/hr. This emission limit for PM-10, based on the Higher Heating Value (HHV) of fuel, applies to the auxiliary boiler firing on natural gas (Process 010) or No. 2 fuel oil (Process 011), where initial stack testing was required for compliance.

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Test Method 201 or 201A, contained in 40CFR51, Appendix M, shall be utilized for the determination of in-stack PM-10 emissions. Additional stack testing may be required to verify compliance.

Parameter Monitored: PM-10

Upper Permit Limit: 11.3 pounds per hour

Reference Test Method: 201 or 201A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 98: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 98.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Regulated Contaminant(s):

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

Item 98.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This 0.20 lbs/MMBtu emission limit for NO_x, established under the original PSD Permit and based on the Higher Heating Value (HHV) of fuel, applies to the auxiliary boiler firing on natural gas (Process 010) or No. 2 fuel oil (Process 011). The initial stack test, conducted February 1991, verified compliance with an average emission rate for NO_x of 0.14 lb/mmBTU while firing natural gas and 0.12 lb/mmBTU while firing distillate (No. 2) oil. Additional stack testing may be required to verify continued compliance.

The presumptive NO_x RACT limit of 0.08 lbs/MMBtu specified under 6NYCRR227-2.4(c)(1)(ii) for EU Y-00002, Process 010 and Process 011 supercede this PSD limit. This limit became effective on July 1, 2014.



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A stack test was completed on September 1, 2015 only firing natural gas (process 10). The test yielded an emission rate for NO_x of 0.07 lbs/MMBtu.

Reference Test Method: Method 7, 7E, or 19 40 CFR Part 60, Appendix A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 99: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 99.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 99.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This emission limit of 0.038 lbs/MMbtu for CO, established under the original PSD Permit and based on the Higher Heating Value (HHV) of fuel, applies to the auxiliary boiler firing on natural gas (Process 010) or No. 2 fuel oil (Process 011). The initial stack test, conducted February 1991, verified compliance with an average emission rate for CO of 0.023 lb/mmBTU while firing natural gas and 0.024 lb/mmBTU while firing distillate (No. 2) oil. Additional stack testing may be required to verify continued compliance.

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 0.038 pounds per million Btus
Reference Test Method: Pt 60, AppA, Method 10
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.



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Subsequent reports are due every 6 calendar month(s).

Condition 100: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 100.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 100.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This emission limit of 0.1 lbs/MMbtu for PM-10, is based on the Higher Heating Value (HHV) of fuel and applies to the auxiliary boiler firing on natural gas (Process 010) or No. 2 fuel oil (Process 011), where initial stack testing was required for compliance.

Test Method 201 or 201A, contained in 40CFR51, Appendix M, shall be utilized for the determination of in-stack PM-10 emissions. Additional stack testing may be required to verify compliance.

Parameter Monitored: PM-10

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: 201 or 201A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 101: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 101.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002



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Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 101.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This mass emission rate limit of 4.3 lbs/hr for CO, established under the original PSD Permit, applies to the auxiliary boiler firing on natural gas (Process 010) or No. 2 fuel oil (Process 011). The initial stack test, conducted February 1991, verified compliance with an average mass emission rate for CO of 2.85 lbs/hr while firing natural gas and 2.64 lb/hr while firing distillate (No. 2) oil. Additional stack testing may be required to verify continued compliance.

A stack test was completed on September 1, 2015 for process 10. The test yielded an emission rate for CO of 2.56 lbs/hr.

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 4.3 pounds per hour

Reference Test Method: Pt 60, AppA, Method 10

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 102: Compliance Certification

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 102.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Item 102.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The fuel inlet control valve stops which ensure the auxiliary boiler cannot fire greater than 99 mmBtu/hr shall be welded in place. Fuel usage records must be maintained and must demonstrate that the limit of 99

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mmBtu/hr is not exceeded.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 103: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 52.21(j), Subpart A

Item 103.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Regulated Contaminant(s):

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

Item 103.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This mass emission rate limit of 22.6 lbs/hr for NO_x, established under the original PSD Permit, applies to the auxiliary boiler firing on natural gas (Process 010) or No. 2 fuel oil (Process 011). The initial stack test, conducted February 1991, verified compliance with an average mass emission rate for NO_x of 16.08 lbs/hr while firing natural gas and 12.07 lb/hr while firing distillate (No. 2) oil. Additional stack testing may be required to verify continued compliance.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 22.6 pounds per hour

Reference Test Method: Method 7, 7E, or 19 40 CFR Part 60, Appendix A

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 104: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021



Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ

Item 104.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

Item 104.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility's emissions for Hazardous Air Pollutants (HAPs) are below 10 tons per year, which makes them an area source for HAPs. Therefore, should the auxiliary boiler run on oil for 48 hours or more, it would meet the definition of an oil fired boiler under Subpart JJJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, and must then comply with the requirements of this regulation.

When a boiler becomes subject to this rule,

Submit notification of such a change within 30 days of the change [§63.11225(g)].

Demonstrate compliance with the rule within 180 days of the change [63.00210(h)].

The compliance requirements of this rule are not included in this permit because the facility anticipates burning natural gas for the foreseeable future.

Subpart JJJJJJ (6J's), defines oil subcategory as follows;

Oil subcategory (oil fired) includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories. Gas-fired boilers that burn liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or for periodic testing are not included in this definition. Periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

The fuel use records shall be kept on site and made available for review upon request and submitted to the

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department upon request.

Monitoring Frequency: When firing distillate fuel oil
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 105: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 6 NYCRR 227.2 (b) (1)

Item 105.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002
Process: 011

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 105.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulate emission limit for stationary combustion installation firing oil. The owner or operator shall complete the following once per term of this permit should the facility burn oil:

- 1) Submit to the Department an acceptable protocol for the testing of particulate emission limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) All records shall be maintained at the facility for a minimum of five years.

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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Subsequent reports are due every 6 calendar month(s).

Condition 106: Exemption from the averaging period.
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.42c(h), NSPS Subpart Dc

Item 106.1:

This Condition applies to Emission Unit: Y-00002
Process: 011

Item 106.2:

Compliance with emission limits and/or fuel oil sulfur limitations shall be based on a certification from the fuel supplier as stated in paragraph 40 CFR 60-Dc.48c(f)(1), (2), or (3) as applicable.

Condition 107: Enforceability
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.42c(i), NSPS Subpart Dc

Item 107.1:

This Condition applies to Emission Unit: Y-00002
Process: 011

Item 107.2:

The sulfur dioxide emission limits, percentage reductions, and fuel oil sulfur limitations shall apply at all times, including periods of startup, shutdown, and malfunction.

Condition 108: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.43c(c), NSPS Subpart Dc

Item 108.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002
Process: 011

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 108.2:

Compliance Certification shall include the following monitoring:

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

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Monitoring Description:

On and after the date on which the initial performance test is completed or required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 million Btu/hr) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Compliance with this requirement shall be verified as specified under the facility level condition for 6NYCRR227-1.3. Which Requires daily requires visible emission observations when burning oil.

The particulate matter and opacity standards of section 40 CFR 60-Dc.43c apply at all times, except during periods of startup, shutdown, and malfunction.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 109: Enforceability of particulate matter and opacity standards.
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.43c(d), NSPS Subpart Dc

Item 109.1:
This Condition applies to Emission Unit: Y-00002
Process: 011

Item 109.2:
The particulate matter and opacity standards of section 40 CFR 60-Dc.43c apply at all times, except during periods of startup, shutdown, and malfunction.

Condition 110: Alternative compliance methods for sulfur dioxide.
Effective between the dates of 11/08/2016 and 11/07/2021



Applicable Federal Requirement:40CFR 60.44c(h), NSPS Subpart Dc

Item 110.1:

This Condition applies to Emission Unit: Y-00002
Process: 011

Item 110.2:

Facilities demonstrating compliance through venter certification shall follow the compliance procedures listed in paragraphs 40 CFR 60-Dc.48c(f)(1), (2), or (3), as applicable.

**Condition 111: Compliance methods for particulate matter.
Effective between the dates of 11/08/2016 and 11/07/2021**

Applicable Federal Requirement:40CFR 60.45c, NSPS Subpart Dc

Item 111.1:

This Condition applies to Emission Unit: Y-00002
Process: 011

Item 111.2:

The facility shall conduct compliance testing for particulate matter by the methods listed in this section 40 CFR 60-Dc.45c.

**Condition 112: Recordkeeping and reporting.
Effective between the dates of 11/08/2016 and 11/07/2021**

Applicable Federal Requirement:40CFR 60.48c, NSPS Subpart Dc

Item 112.1:

This Condition applies to Emission Unit: Y-00002
Process: 011

Item 112.2:

The facility shall maintain reports and records in accordance with the provisions of this section 40 CFR 60-Dc.48c.

**Condition 113: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021**

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

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Item 113.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Process: 011

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 113.2:

Compliance Certification 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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 114: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 6 NYCRR 227-2.4 (c) (1) (ii)

Item 114.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002

Emission Point: 00002

Regulated Contaminant(s):

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

Item 114.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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Indeck Yerkes Auxiliary Boiler, EU 00002 is subject to Subpart 227-2 NO_x RACT requirements for mid-sized boilers. The boiler is capable of firing both distillate oil (#2 fuel oil) and natural gas. Therefore Indeck Yerkes must comply with the mixed fuel limit of 0.08 lbs/MMBtu for Oxides of Nitrogen. The boiler was tested September 1 of 2015 while firing natural gas and verified compliance with their highest run reaching an emission rate of 0.07 lbs/MMBtu for NO_x. The average emission rate during the test was 0.054 lbs/MMBtu.

Should Yerkes choose to run the boiler on distillate oil, an additional test shall be conducted to show that the boiler can meet the 0.08 lbs/MMbtu limit while firing on oil. The test must be conducted within 30 days of startup on oil. Any installment of an air pollution control equipment will require a second testing within 60 days of installation.

A stack test shall be conducted once per term of permit but no less than once every 5 years (20 calendar quarters) whether it is fired on gas or oil. In addition, semi-annual reports shall be submitted to the department. The reports shall verify compliance by referencing that the most recent stack test is meeting the limit of 0.08 lbs/MMBtu of NO_x.

Upper Permit Limit: 0.08 pounds per million Btus
Reference Test Method: 40 CFR part 60 Appendix A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 115: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement: 40CFR 52.21(j), Subpart A

Item 115.1:
The Compliance Certification activity will be performed for:

Emission Unit: Y-00002 Emission Point: 00002
Process: 011

Item 115.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

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Monitoring Description:

Distillate fuel oil use in the auxiliary boiler shall be limited to 1440 hours per year calculated on a daily rolling basis. Records hours of operation must be kept and made available for inspection upon request.

The total rolling hours of operation must be submitted with each quarterly report.

Work Practice Type: HOURS PER YEAR OPERATION

Upper Permit Limit: 1440 hours per year

Monitoring Frequency: HOURLY

Averaging Method: ANNUAL TOTAL ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).

Condition 116: Compliance Certification
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable Federal Requirement:40CFR 60.42c(d), NSPS Subpart Dc

Item 116.1:

The Compliance Certification activity will be performed for:

Emission Unit: Y-00002 Emission Point: 00002
Process: 011

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 116.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

On and after the date on which the initial performance test is completed or required to be completed under 40CFR60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The facility BACT limit of 0.30% sulfur by weight in fuel oil established under 40CFR52.21(j) supersedes the limit of 0.5% sulfur by weight specified in 40CFR60.42c(d).

Facilities demonstrating compliance through vender certification shall follow the compliance procedures listed in paragraphs 40 CFR 60-Dc.48c(f)(1), (2), or (3), as applicable.

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In addition, this permit also contains a more stringent sulfur requirements from Subpart 225-1: Fuel Composition and Use – Sulfur Limitations. 6NYCRR Subpart 225 restricts the facility from burning #2 fuel oil (distillate) that has a higher sulfur content than 0.0015 percent sulfur by weight (15 ppm). Both limits apply.

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 0.5 percent by weight

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED PER OCCURRENCE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).



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: 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 applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 117: Contaminant List

Effective between the dates of 11/08/2016 and 11/07/2021

Applicable State Requirement:ECL 19-0301

Item 117.1:

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

CAS No: 000124-38-9
Name: CARBON DIOXIDE

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

CAS No: 0NY075-00-0
Name: PARTICULATES

CAS No: 0NY075-00-5
Name: PM-10

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

Condition 118: Malfunctions and start-up/shutdown activities

Effective between the dates of 11/08/2016 and 11/07/2021



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owners and operators and, to the extent applicable, the CO₂ authorized account representative of each CO₂ budget source and each CO₂ budget unit at the source shall comply with the monitoring requirements of Subpart 242-8. The emissions measurements recorded and reported in accordance with Subpart 242-8 of this Part shall be used to determine compliance by the unit with the following CO₂ requirements:

(1) The owners and operators of each CO₂ budget source and each CO₂ budget unit at the source shall hold CO₂ allowances available for compliance deductions under Section 242-6.5, as of the CO₂ allowance transfer deadline, in the source's compliance account in an amount not less than the total CO₂ emissions for the control period from all CO₂ budget units at the source, as determined in accordance with Subparts 242-6 and 242-8.

(2) Each ton of CO₂ emitted in excess of the CO₂ budget emissions limitation shall constitute a separate violation of this Part and applicable state law.

(3) A CO₂ budget unit shall be subject to the requirements specified in item 1 starting on the later, of January 1, 2009 or the date on which the unit commences operation.

(4) CO₂ allowances shall be held in, deducted from, or transferred among CO₂ Allowance Tracking System accounts in accordance with Subparts 242-5, 242-6, and 242-7, and Section 242-10.7.

(5) A CO₂ allowance shall not be deducted, in order to comply with the requirements specified in item 1, for a control period that ends prior to the allocation year for which the CO₂ allowance was allocated. A CO₂ offset allowance shall not be deducted, in order to comply with the requirements under item 1, beyond the applicable percent limitations set out in 6NYCRR Part 242-6.5(a)(3).

(6) A CO₂ allowance under the CO₂ Budget Trading Program is a limited authorization by the Department or a participating state to emit one ton of CO₂ in accordance with the CO₂ Budget Trading Program. No provision of the CO₂ Budget Trading Program, the CO₂ budget permit application, or the CO₂ budget permit or any provision of law shall be construed to limit the authority of the Department or a participating state to terminate or limit

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such authorization.

(7) A CO2 allowance under the CO2 Budget Trading Program does not constitute a property right.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 6 calendar month(s).

Condition 120: Compliance Demonstration
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable State Requirement:6 NYCRR Subpart 242-4

Item 120.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000124-38-9 CARBON DIOXIDE

Item 120.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual Compliance Certification Report:

(a) For each control period in which a CO2 budget source is subject to the CO2 requirements of subdivision 242-1.5(c) of this Part, CO2 authorized account representative of the source shall submit to the department by March 1st following the relevant control period, a compliance certification report. The control period is a three-calendar-year time period.

(b) The compliance certification report shall include the following elements:

(1) identification of the source and each CO2 budget unit at the source;

(2) as an option, the serial numbers of the CO2 allowances that are to be deducted from the source's compliance account under section 242-6.5 of this Part for the control period, including the serial numbers of any CO2 offset allowances that are to be deducted subject to the limitations of section 242-6.5(a)(3) of this Part; and



(3) the compliance certification under subdivision (c) of this section (below).

(c) In the compliance certification report the CO2 authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the CO2 budget units at the source in compliance with the CO2 Budget Trading Program, whether the source and each CO2 budget unit at the source for which the compliance certification is submitted was operated during the calendar years covered by the report in compliance with the requirements of the CO2 Budget Trading Program, including:

(1) whether the source was operated in compliance with the CO2 requirements of section 242-1.5(c) of this Part;

(2) whether the monitoring plan applicable to each unit at the source has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute CO2 emissions to the unit, in accordance with Subpart 242-8 of this Part;

(3) whether all the CO2 emissions from the units at the source were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with Subpart 242-8 of this Part. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

(4) whether the facts that form the basis for certification under Subpart 242-8 of each monitor at each unit at the source, or for using an excepted monitoring method or alternative monitoring method approved under Subpart 242-8 of this Part, if any, have changed; and

(5) if a change is required to be reported under paragraph (c)(4) above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION



Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 121: Compliance Demonstration
Effective between the dates of 11/08/2016 and 11/07/2021

Applicable State Requirement:6 NYCRR Subpart 242-8

Item 121.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 000124-38-9 CARBON DIOXIDE

Item 121.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Recordkeeping and Reporting (6NYCRR Part 242-8.5)

(a) General provisions. The CO₂ authorized account representative shall comply with all recordkeeping and reporting requirements in this section, the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the requirements of section 242-2.1(e) of this Part.

(b) Monitoring plans. The owner or operator of a CO₂ budget unit shall submit a monitoring plan in the manner prescribed in 40 CFR 75.62.

(c) Certification applications. The CO₂ authorized account representative shall submit an application to the department within 45 days after completing all CO₂ monitoring system initial certification or recertification tests required under section 242-8.2 of this Subpart including the information required under 40 CFR 75.63 and 40 CFR 75.53(e) and (f).

(d) Quarterly reports. The CO₂ authorized account representative shall submit quarterly reports, as follows:

(1) The CO₂ authorized account representative shall report the CO₂ mass emissions data and heat input data for the CO₂ budget unit, in an electronic format prescribed by the administrator unless otherwise prescribed by the department for each calendar quarter.

(2) The CO₂ authorized account representative shall submit each quarterly report to the department or its agent within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in subpart H of 40 CFR

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part 75 and 40 CFR 75.64. Quarterly reports shall be submitted for each CO₂ budget unit (or group of units using a common stack), and shall include all of the data and information required in subpart G of 40 CFR part 75, except for opacity, NO_x, and SO₂ provisions.

(3) The CO₂ authorized account representative shall submit to the department or its agent a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(i) the monitoring data submitted were recorded in accordance with the applicable requirements of this Subpart and 40 CFR part 75, including the quality assurance procedures and specifications;

(ii) for a unit with add-on CO₂ emissions controls and for all hours where data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emissions controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B of 40 CFR part 75 and the substitute values do not systematically underestimate CO₂ emissions; and

(iii) the CO₂ concentration values substituted for missing data under Subpart D of 40 CFR part 75 do not systematically underestimate CO₂ emissions.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

Subsequent reports are due every 3 calendar month(s).