**Facility DEC ID: 2630800096**

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

**IDENTIFICATION INFORMATION**

Permit Type: Air Title V Facility
Permit ID: 2-6308-00096/00009
Mod 0 Effective Date: 06/28/2022 Expiration Date: 06/27/2027

Mod 1 Effective Date: Expiration Date:

Permit Issued To:KIAC PARTNERS
C/O CEA KENNEDY OPERATORS, INC
717 TEXAS AVE STE 1000
HOUSTON, TX 77002

Contact: JARON BERGIN
CALPINE CORPORATION
717 TEXAS AVE STE 1000
HOUSTON, TX 77002

Facility: CALPINE JFK ENERGY CENTER
KENNEDY INTERNATIONAL AIRPORT BLDG 49|Enter Through Sign To Terminal 7 Parking
JAMAICA, NY 11430

Contact: MICHAEL O'BRIEN
CALPINE JFK ENERGY CENTER
KENNEDY INTERNATIONAL AIRPORT BLDG 49
JAMAICA, NY 11430
(718) 995-0547

Description:
This is a Title V permit modification for a major facility, Calpine JFK Energy Center (KIAC) Facility located in Jamaica, New York. The Emission Unit B-OILRS, which includes six existing emergency boilers (Ren 2, Mod 1) that are located at the KIAC facility. These six boilers are owned by the Port Authority of New York / New Jersey (PANY / NJ) and currently operated by KIAC Partners through its affiliate CEA Kennedy Operators, Inc. This permit modification is to replace the existing six Hot Water Generators (HWG) with five dual-fuel fired (5) Cleaver-Brooks model CBEX-2W-200-1500-200HTHW burning natural gas and Jet A fuel oil. The HWGs are used to produce hot water for the airport terminals and are operated only in the event of natural gas curtailment or operational issues with the two combustion turbines that are part of the cogeneration plant.

This facility supplies electricity to the airport and the Consolidated Edison (Con Ed) Power Distribution Grid, and supplies steam to the airport's central heating and cooling plant. The facility operates a cogeneration plant, which comprises of two (2) General Electric (GE) LM6000 PC SPRINT combustion turbines, which are fire both

natural gas and Jet A Fuel Oil. Each combustion turbine is equipped with a Heat Recovery Steam Generator (HRSG) equipped with duct burners that fire only natural gas. Each turbine is designed with water injection for NOx control and Selective Catalytic Reduction (SCR) as the secondary NOx control system. The SCR catalyst as the dual function of CO oxidation to CO2 and NOx reduction to N2 and H2O. The Facility operates and maintains Continuous Emission Monitors (CEM) and continuous data recorder NOx, CO Oxygen and Ammonia to monitor the emissions from each combustion turbine/duct burner.

Additionally, the facility will be replacing the existing black start generator with a new Caterpillar 3516C diesel generator set with a rated electric output of 2,000 kW. The black start diesel generator will be used only to bring the facility back online and normal test and/or maintenance. A dedicated 3,500-gallon storage tank will be added for on-site storage of ultra-low sulfur distillate (ULSD) for the new generator.

In this permit modification, conditions were streamline to make the permit more accessible and comprehensive.

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

Permit Administrator: STEPHEN A WATTS
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5401

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.

## PAGE LOCATION OF CONDITIONS

**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.

Item3.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

**Item 3.3**
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

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

**Item 4.1:**
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

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

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

**Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS**
**Applicable State Requirement: 6 NYCRR 621.6 (a)**

**Item 5.1:**
Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

**Permit ID: 2-6308-00096/00009** **Facility DEC ID: 2630800096**

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

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:KIAC PARTNERS
C/O CEA KENNEDY OPERATORS, INC
717 TEXAS AVE STE 1000
HOUSTON, TX 77002

Facility: CALPINE JFK ENERGY CENTER
KENNEDY INTERNATIONAL AIRPORT BLDG 49|Enter Through Sign To Terminal 7 Parking
JAMAICA, NY 11430

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

Permit Effective Date: Permit Expiration Date:

## PAGE LOCATION OF CONDITIONS

**PAGE**

**FEDERALLY ENFORCEABLE CONDITIONS**
**Facility Level**

78 84 : Compliance Certification
79 86 : Compliance Certification
81 1-18 40CFR 60.7(a), NSPS Subpart A: Date of construction notification - If a COM is not used.
81 94 40CFR 60.7(a), NSPS Subpart A: Compliance Certification
82 107 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Certification
83 1-19 40CFR 60.48c(g), NSPS Subpart Dc: Compliance Certification
84 1-20 40CFR 60, NSPS Subpart IIII: Applicability
84 110 40CFR 63, Subpart A: Compliance Certification
86 1-21 40CFR 63, Subpart JJJJJJ: Applicability
86 1-22 40CFR 63.11195, NESHAP Subpart JJJJJJ: Boilers not subject
87 111 40CFR 63.11201(b), Subpart JJJJJJ: Compliance Certification
89 112 40CFR 63.11201(b), Subpart JJJJJJ: Compliance Certification
90 113 40CFR 63.11205(a), Subpart JJJJJJ: Compliance Certification
92 114 40CFR 63.11214(c), Subpart JJJJJJ: Compliance Certification
94 115 40CFR 63.11223(b), Subpart JJJJJJ: Compliance Certification
96 116 40CFR 63.11223(c), Subpart JJJJJJ: Compliance Certification
99 118 40CFR 63.11225(b), Subpart JJJJJJ: Compliance Certification
101 119 40CFR 63.11225(d), Subpart JJJJJJ: Compliance Certification

**Emission Unit Level**

103 123 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
104 124 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
113 125 : Emission Unit Permissible Emissions
113 1-23 6 NYCRR 227-2.4 (c) (1): Compliance Certification

**EU=B-OILRS**

115 1-24 40CFR 60.8(a), NSPS Subpart A: Performance testing timeline.

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

117 133 ECL 19-0301: Contaminant List
118 138 : Compliance Demonstration
118 139 : Compliance Demonstration

NOTE: * preceding the condition number indicates capping.

## FEDERALLY ENFORCEABLE CONDITIONS

Renewal 3/Mod 1/DRAFT ****** 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. When additional applicable requirements under the act become applicable to a title V facility with a remaining permit term of 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 the 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 section 201- 6.6 of this Subpart.

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 7:** **Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 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 are to be electronically submitted and are required by any new or renewed Title V permits issued after January 1, 2021. The first reporting year under this provision will be the reporting year in which the permit was issued or reporting year 2025 (emission statements due in 2026), whichever is earlier.

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 0 days after the reporting period.
The initial report is due 3/31/2023.
Subsequent reports are due every 12 calendar month(s).

**The following conditions are subject to annual compliance certification requirements for Title V permits only.**

**Condition 20: Emission Unit Definition**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

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

**Item 20.1(From Mod 1):**
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: B-OILRS
Emission Unit Description:
Currently: Emission Unit B-OILRS consists of six (6) boilers. These boilers are owned by the Port Authority of New York/New Jersey (PANY/NJ), but operated by Calpine. In the past, these boilers have operated under Certificates to Operate that were issued to the PANY/NJ on November 22, 1995.

The Nitrogen Oxides (NOx) total emissions from the six emergency boilers at the facility is limited to 24 tons per year.

These boilers are used for the production of hot water for the airport terminals; the boilers are operated only in the event of natural gas curtailment or operational issues with the combustion turbines (Emission Sources GT001 and GT002).

The six boilers operate on natural gas (Processes BG1 & BG2), and Jet Fuel A.

Boilers HWG02 & HWG03 are not equipped with an oxygen trim system as an emission control, but Boilers HWG01, HWG04, HWG05 & HWG06 are equipped with an oxygen trim system as

an emission control.

Modification:
This emmision unit will consists of five (5) new Hot Water Generators (HWGs) and one (1) Black Start Diesel Generator (BSDG). These will replace the six (6) existing HWGs and existing BSDG in Emission Unit B-OILRS. Like the existing HWGs, the new HWGs will be owned by the Port Authority of New York/New Jersey (PANY/NJ), but operated by Calpine.

The HWGs will be used for the production of hot water for the airport terminals; they will be operated only in the event of natural gas curtailment or operational issues with the combustion turbines (Emission Sources GT001 and GT002).

These five (5) HWGs will be burning Natural Gas and Jet Fuel A.

Additionally, the facility will be replacing the existing black start generator with a new Caterpillar 3516C diesel generator set with a rated electric output of 2,000 kW. The black start diesel generator will be used only to bring the facility back online and for normal testing and/or maintenance. A dedicated 3,500-gallon storage tank will be added for on-site storage of ultra-low sulfur distillate (ULSD) for the new generator.

Building(s): COGENB

**Item 20.2(From Mod 1):**
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: U-00001
Emission Unit Description:
Emission Unit U-00001 consists of one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT001) equipped with a supplemental firing COEN duct burner (Emission Source DB001). The combustion turbine fires natural gas (Processes GT1 & GT5) as a primary fuel and low sulfur distillate oil (Processes GT3 & GT7) as a secondary backup fuel. Processes GT1 & GT3 are with supplemental firing of duct burner and Processes GT5 & GT7 are with no supplemental firing of duct burner. The duct burner (Emission Source DB001) is limited to natural gas firing. The combustion turbine/duct burner unit vents through a stack, identified as Emission Point E0001, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR01) as an emission control.

Building(s): COGENB

**Item 20.3(From Mod 1):**
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: U-00002
Emission Unit Description:
Emission Unit U-00002 consists of one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT002) equipped with a supplemental firing COEN duct burner (Emission Source DB002). The combustion turbine fires natural gas (Processes GT2 & GT6) as a primary fuel and low sulfur distillate oil (Processes GT4 & GT8) as a secondary backup fuel. Processes GT2 & GT4 are with supplemental firing of duct burner and Processes GT6 & GT8 are with no supplemental firing of duct burner. The duct burner (Emission Source DB002) is limited to natural gas firing. The combustion turbine/duct burner unit vents through a stack, identified as Emission Point E0002, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR02) as an emission control.

Building(s): COGENB

**Condition 31: Non Applicable requirements**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 31.1:**
This section contains a summary of those requirements that have been specifically identified as being not applicable to this facility and/or emission units, emission points, processes and/or emission sources within this facility. The summary also includes a justification for classifying any such requirements as non-applicable.

6 NYCRR Subpart 231-2
Reason: The TP upgrade allows for increased fuel firing rate at a higher temperature and greater turbine generator output. With the upgrades there will be the potential for a nominal 2.5 MW increase above the full load nominal MW output on each CTG. The upgrades do not change the emissions performance of the units on a concentration basis, and the increased (MMBtu/hr) firing rate will result in increased mass (lb/hr) emission rates at the conditions where it is applied, but not exceed permit limits. The upgrades are only applied for full load operation of the combustion turbines.

Significant Project Threshold:
The project does not change any permitted emission limits and has an actual emission increase below the Part 231 thresholds of 2.5 tons/yr for NOx and VOC, and therefore does not trigger New Source Review (NSR) and requires only

a Title V minor modification. Because KIAC is an existing major source, the applicable regulations are in Subpart 231-6 (Modifications to Existing Major Facilities in Non-attainment Areas and Attainment Areas of the state within the Ozone Transport Region). According to the 231-6.1 Applicability, the requirements of this Subpart apply to the construction and/or operation of any proposed modification at an existing major facility located in a non-attainment area as follows:

Baseline Emissions:
A period of time used to quantify a credible emission increase. The baseline period consists of any 24 consecutive months within the five years immediately preceding the date of receipt by the Department of the permit application. The baseline (24 months over last 5 years) period of clendar year 2016 and 2017 was selected to assure the full 24-months block is within the 5-year period and to include relative high amount of operation and NOx emissions for a conservative analysis.
Operating Hours and their NOx emissions for the last 5 years:

| Year | Operating Hours | NOx Emissions(tons) |
|---|---|---|
| 2015 | 14,151 | 74.2 |
| 2016 | 13,864 | 77.7 |
| 2017 | 12,133 | 69.0 |
| 2018 | 12,489 | 72.0 |
| 2019 | 10,852 | 58.5 |

The NOx emisions are based on the continuous emissions monitoring systems (CEMS) for the two CTG units. The resulting baseline emissions are 73.4 tpy for NOx and 8.5 tpy for VOC.
Projected Operating Hours and their NOx emissions (based on Calpine dispatch modeling for the units and does not take into account effects of the proposed TP upgrade because the relatively modest heat rate impact of the upgrades on the units and limited expected utilization assure that projections are reliable for post upgrade dispatch ) for the next 5 years:

| Year | Operating Hours | NOx Emissions (tons) |
|---|---|---|
| 2020 | 7,244 | 44.7 |
| 2021 | 8,803 | 54.3 |
| 2022 | 9,353 | 57.7 |
| 2023 | 9,278 | 57.2 |
| 2024 | 8,262 | 50.9 |
| 2025 | 9,413 | |

58.1

Projected Actual Emissions:
Based on the above analysis, the project emission potential, based on a comparison of past actual to projected future actual emissions, does not equal or exceed the applicable significant project thresholds under Part 231 or PSD significant emission rate thresholds. The project is therefore considered a minor modification and is subject to the provisions of section 231-11.2 of Part 231 and provisions of Subpart 201-6 (Title V Facility Permits), for a minor permit modification that does not trigger an NSR major modification.
The Net Emission Increase (NEI) has to be < Significant Emission Increase (SNEIT) of 25 tpy NOx for this project.
NEI = NOx emissions from Project Emission Potential (PEP)
=
NEI = 2.5 tpy = 2.5 tpy < 25 tpy

6 NYCRR 231-2.2 (a)
Reason: 6 NYCRR 231-2.2 (a):

An application to implement the proposed project would consider:

New Source Review non-Applicability:

A. A project that does not change any permitted emission limits and that has an actual emission increase below the Part 231 thresholds of 2.5 tons/year NOx and VOC does not trigger NSR and requires only a Title V minor modification.

B. A project emission increase in the range of 2.5 to 25 tons/year NOx and VOC would require a netting analysis, but may still not trigger NSR and requires only a Title V modification if the net emissions increase is below 25 tons/year NOx and VOC. Calpine provided the following analysis in support of its application for the project:

C. An applicability determination according to NYCRR Part 231 involving comparison of past actual to projected future actual emissions.

D. Past actual (baseline) emissions will be based on a representative 24-month period from the previous 5 years.

E. Projected future actual emissions will be based on

projected operations, but may default to the same operation/demand as for the baseline period, except for the increases associated with the proposed project. Increases due to increased demand would typically be excluded as “could have accommodated” emissions.

Projected Actual Emissions:

Based on the above analysis, the project emission potential, based on a comparison of past actual to projected future actual emissions, does not equal or exceed the applicable significant project thresholds under Part 231 or PSD significant emission rate thresholds. The project is therefore considered a minor modification and is subject to the provisions of section 231-11.2 of Part 231 and provisions of Subpart 201-6 (Title V Facility Permits), for a minor permit modification that does not trigger an NSR major modification.

6 NYCRR 231-6.1
Reason: The proposed permit modification is to upgrade the software for two General Electric LM6000 (Emission Sources GT001 & GT002) aeroderivative combustion turbines to enhance utilization of the existing units' capability for better performance.

The proposed modification (combustion turbine upgrade) project has a projected actual emissions increase which does not equal or exceed the applicable significant project threshold of 2.5 tons/year of NOx or VOC in a severe ozone non-attainment area. The baseline selected represents the maximum 24-month period for GT1 and GT2 NOx emissions from the prior 5 years (contemporaneous period). The projected increases were calculated based on applying the upgrade fuel firing rate increase to the baseline operating hours and multiplying fuel usage by emission factors for the units. Future operation for the next five years is projected to be less than that for the selected baseline period.

Operating Hours and their NOx emissions for the last 5 years:

| Year | Operating Hours | NOx Emissions(tons) |
|---|---|---|
| 2015 | 14,151 | 74.2 |
| 2016 | 13,864 | 77.7 |
| 2017 | 12,133 | 69.0 |
| 2018 | 12,489 | 72.0 |
| 2019 | 10,852 | |

58.5

Projected Operating Hours and their NOx emissions (based on Calpine dispatch modeling for the units and does not take into account effects of the proposed TP upgrade because the relatively modest heat rate impact of the upgrades on the units and limited expected utilization assure that the projections are reasonably reliable for post-upgrade dispatch) for the next 5 years:

| Year | Operating Hours | NOx Emissions (tons) |
|---|---|---|
| 2020 | 7,244 | 44.7 |
| 2021 | 8,803 | 54.3 |
| 2022 | 9,353 | 57.7 |
| 2023 | 9,278 | 57.2 |
| 2024 | 8,262 | 50.9 |
| 2025 | 9,413 | 58.1 |

Because the projected future operation is < the operation associated with the baseline period, the baseline operation was utilized for a conservative basis for calculation of projected actual emissions. Two years of hourly data was collected the 24-month baseline, including operating hours, generation, fuel heat input and NOx emissions. The upgrade will only be implemented when a turbine is operating at full load.

40 CFR Part 60, Subpart Dc
Reason: 40 CFR 60 Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Steam Generating Units):

Because the six boilers were constructed before June 9, 1989, these boilers are not subject to 40 CFR 60 Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Steam Generating Units).

40 CFR Part 60, Subpart KKKK
Reason: 40 CFR Part 60, Subpart KKKK:

The applicability of NSPS Subpart KKKK requirements requires two (2) criteria are met: 1) an operational change occurs, and 2(20 potential hourly emission-rates of regulated pollutants increase. The KIAC combustion turbines TP upgrades may be considered to be a change in

operation. The regulated pollutants under Subpart KKKK are SO2 and NOx; therefore, to assess applicability of the second criteria, the potential hourly mass emission rate of SO2 and NOx upon implementation of the TP upgrades must be evaluated to assess whether an increase will occur.

The TP upgrades could increase emissions of NOx from the combustion turbines. However, NOx emissions from the KIAC combustion turbines are controlled by SCRs, and compliance with permit limits is continuously verified with NOx CEMS. Because KIAC can operate the SCRs to maintain current mass emission limits, Calpine is not requesting any increase in potential hourly mass emission rates for NOx. Likewise, Calpine is not seeking an increase in allowable emissions of SO2. Because no increase in the potential hourly emissions of NOx or SO2 will occur due to the change in operation associated with the TP upgrades, the requirements of NSPS Subpart KKKK is not triggered.

Under 40 CFR 60.15 (b), "reconstruction" is defined as "the replacement of components of an existing facility to such extent that the fixed capital cost of the new components exceeds 50 % of the fixed capital costthat would be required to construct a compatible new facility". This project is not considered a "reconstruction" because its fixed capital cost for the software upgrade is much less than 50% of the fixed capital cost to construct comparable entirely new combustion turbine units.

In conclusion, this project does not trigger NSPS Subpart KKKK, because the change is neither a modification nor reconstruction.

**Condition 32: Facility Permissible Emissions**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**
**Applicaton Specific Data**

**Condition 33: Capping Monitoring Condition**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 33.1:**
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to

the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR Subpart 231-2

**Item 33.2:**
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

**Item 33.3:**
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

**Item 33.4:**
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

**Item 33.5:**
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

**Item 33.6:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD1 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD1 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD1 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD1 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD1 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD1 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015

Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG1 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG1 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG1 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG1 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG1 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG1 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 33.7:**
Compliance Certification shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
In order to limit emissions below applicability thresholds for both 40 CFR 52.21 Prevention of Significant Deterioration (PSD) and 6NYCRR Part 231-2 New Source Review (NSR) requirements, annual emissions of Nitrogen Oxides (NOx) from Emission Unit B-OILRS shall not exceed 24 tons per year, on a rolling 12-month basis.

The NOx emissions for each of the six boilers shall be calculated on a monthly basis. Emission calculations shall be based upon the quantity of each fuel burned in the boilers. Monthly emissions shall be calculated for each boiler using the following methodology:

MN = Monthly Emissions of NOx from Boiler when firing Natural Gas (tons/month) = (Q N) (1,020 MMBtu/Mscf) (EF N) [ ton / 2000 lb]

Where,
Q N = Quantity of Natural Gas burned in Boiler in Mscf/ month,
EF N = the measured NOx emission rate for the Boiler in lb/MMBtu, as determined by the most recent stack test of the boiler or a representative boiler at the facility that has the same equipment manufacturer, make and model number.

MD = Monthly Emissions of NOx from Boiler when firing Light Distillate (tons/month) = (Q L) (135 MMBtu/Kgal) (EF L) [ ton / 2000 lb]

Where
Q L = Quantity of Light Distillate burned in Boiler in Kgal / month,
EF L = the measured NOx emission rate for the Boiler in lb/MMBtu, as determined by the most recent stack test of the boiler or a representative boiler at the facility that has the same equipment manufacturer, make and model number.

MT = Total Monthly Emissions of NOx from Boiler = MN + MD

MAll = Total Monthly Emissions of NOx from All Boilers = sum {MT for all boilers}

KIAC shall calculate the total monthly NOx emissions for each boiler (MT) on a monthly basis. The total monthly NOx emissions for each of the six boilers shall be summed to determine the total monthly emissions for all six boilers (MAll). A 12-month rolling total of NOx emissions for all six boilers shall be calculated each month.

Records of monthly NOx emissions shall be maintained in a permanently bound log or in electronic format. For each month, the record shall contain the amount of each fuel burned in each boiler, total NOx emissions from each boiler for the month, total NOx emissions from all boilers, and the 12-month rolling total NOx emissions from all boilers. Monthly fuel use data will be derived from metering and/or purchase records. This information, including fuel use records, must be kept at the facility for at least five years and must be made available to a representative of the Department upon request during normal business hours.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 24 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2023.
Subsequent reports are due every 12 calendar month(s).

**Condition 38: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 38.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 38.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The provisions of 6NYCRR Subpart 202-2 apply to this facility. Any owner or operator of a facility in a nonattainment area for ozone must submit an emission statement to the department for any calendar year in which the facility has the potential to emit any regulated air pollutant listed in Table 1 of 6NYCRR 202-2.1, at a rate which equals or exceeds the applicable threshold:

Table 1

Facility Reporting Thresholds - Nonattainment Areas

| Air Contaminant | Threshold (tons/year) |
|---|---|
| Volatile organic Compounds (VOC) | 25 |
| Oxides of Nitrogen (NOx) | 25 |
| Carbon Monoxide (CO) | 100 |
| Sulfur Dioxide (SO2) | 100 |
| Particulate Matter, diameters less than 10 microns (PM10) | 100 |
| Lead and its compounds (measured as elemental lead) | 5 |
| Any one hazardous air pollutants | 10 |
| Combination of hazardous air pollutants | 25 |
| Any other regulated air pollutant | 100 |

Reference Test Method: KEEP RECORDS
Monitoring Frequency: QUARTERLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2023.
Subsequent reports are due every 12 calendar month(s).

**Condition 1-1: Statement dates for emissions statements.**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 202-2.4 (a) (3)**

**Item 1-1.1:**
This facility is required to submit an annual emission statement electronically and these emissions statements must be submitted to the department as per the following schedule:

(i) March 15th of each year for facilities with three or fewer processes listed in their Title V permit:

(ii) March 31st of each year for facilities with four to six processes listed in their Title V permit:

(iii) April 15th of each year for facilities with 7 to 12 processes listed in their Title V permit:

(iv) April 30th of each year for facilities with 13 or more processes listed in their Title V permit.

**Condition 1-2: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 207.2**

**Item 1-2.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-2.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Any person who owns a significant air contamination source, as defined by §207.1, shall submit a proposed episode action plan to the department within 90 days of the effective date of this permit. The plan shall contain detailed steps which will be taken by the air contamination source owner to reduce air contaminant emissions during each stage of an air pollution episode.

Any proposed modification of an approved episode action plan to accommodate advances in technology or knowledge of contaminant effects shall be submitted to the department within 90 days of the request by the department's representative.
The department may issue an episode action plan to any person who fails to submit an acceptable plan or plan modification within the required time when so requested.
Upon petition, within 60 days of approval or issue of an episode action plan, the department shall grant a hearing to the significant air contamination source owner at a time and place as determined by the department.
An owner of a significant air contamination source shall make his episode action plan available at a convenient location on his premises for review by the department's representative, at any time.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 39: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 39.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 39.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Any person who owns a significant air contamination source, as defined by §207.1, shall submit a proposed episode action plan to the department within 90 days of NYSDEC's request to provide such a plan. The plan shall contain detailed steps which will be taken by the air contamination source owner to reduce air contaminant emissions during each stage of an air pollution episode.

Any proposed modification of an approved episode action plan to accommodate advances in technology or knowledge of contaminant effects shall be submitted to the department within 90 days of the request by the department's representative. The department may issue an episode action plan to any person who fails to submit an acceptable plan or plan modification within the required time when so requested.

Upon petition, within 60 days of approval or issue of an episode action plan, the department shall grant a hearing to the significant air contamination source owner at a time and place as determined by the department.

An owner of a significant air contamination source shall make his episode action plan available at a convenient location on his premises for review by the department's representative, at any time.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 41: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 41.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS
Process: BD1 Emission Source: HWG01

Emission Unit: B-OILRS

Process: BD1 Emission Source: HWG02

Emission Unit: B-OILRS
Process: BD1 Emission Source: HWG03

Emission Unit: B-OILRS
Process: BD1 Emission Source: HWG04

Emission Unit: B-OILRS
Process: BD1 Emission Source: HWG05

Emission Unit: B-OILRS
Process: BD1 Emission Source: HWG06

Emission Unit: B-OILRS
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS
Process: BD2 Emission Source: HWG06

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

**Item 41.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
Owners and/or operators of a stationary combustion installations that fire low sulfur distillate oil are limited to the firing of low sulfur 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. Alternatively, Calpine may sample from the uniy's storage tank after each addition of fuel oil to the tank for monitoring the sulfur content.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and

must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. Such records and summaries shall indicate the method used to achieve compliance and include the sampling results.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 42: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 42.1:**
The Compliance Certification activity will be performed for the Facility.

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

**Item 42.2:**
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 stated below.

In order to ensure compliance with the requirements of §225-1.5(b)(2) and §225-1.6, the facility will perform the following activities for low sulfur distillate oil:

1. KIAC shall maintain fuel supplier certifications received for each delivery of low sulfur distillate oil. These certifications shall reflect the sulfur content, specific gravity, and heating value of the low sulfur distillate oil; or

2. KIAC shall sample every delivery of low sulfur distillate oil received at the facility. KIAC shall determine the percent sulfur by weight using Method ASTM D-2622 or other methods approved in advance by the Department; or

3. KIAC shall sample from the unit's storage tank after each addition of fuel oil to the tank for monitoring the sulfur content. KIAC shall determine the percent sulfur by weight using Method ASTM D-2622 or other methods approved in advance by the Department.

4. Data collected pursuant to (1), (2), or (3) must be tabulated and summarized in a form acceptable to the department, and must be retained for at least five years. The owner of a Title V facility must furnish to the department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period, and indicate the method being used to achieve compliance. If there is an exceedance of the sulfur-in-fuel limitation, KIAC shall submit to the DEC a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an exceedance takes place. All records must be maintained at the facility for a minimum of five years.

In lieu of CEMS for SO2, the compliance demonstration methodology for the gas turbines (Emission Sources GT001 & GT002), relies upon Part 225-1.5(b)(2), which provides for "representative sampling and sulfur analysis conducted in a manner approved by the Department".

KIAC primarily uses natural gas for the operation of the two combustion turbines and their associated duct burners, and very infrequently uses distillate fuel oil for the two combustion turbines. But KIAC's contract with NYISO requires that Calpine maintains the ability to have dual fuel capability in the event of natural gas shortages or emergencies.

The two combustion turbines and six emergency boilers at KIAC use the low sulfur distillate oil that is considered to be jet fuel and is supplied by the Kennedy Airport and is the same fuel that is utilized by the airport for fueling airplanes and does not meet the 0.0015 percent sulfur limitation according to 6 NYCRR 225-1.2.

The jet fuel is supplied to the KIAC Energy Center via an

underground pipeline owned by the Port Authority of NY/NJ. The facility has reviewed the sulfur in fuel data for the liquid jet fuel received from the airport and used by the airplanes and also by KIAC in their two combustion turbines and six emergency boilers; the current average sulfur content of the low sulfur distillate oil is 0.074%, and the maximum sulfur content is 0.091%.

As the jet fuel used at KIAC is supplied via pipeline, the facility is required to maintain the collection/analysis of the fuel oil sample each time the fuel is delivered.

The KIAC Energy Center is located in the middle of a very congested hub at the Kennedy Airport, adjacent to Terminal 7. There is no space for additional tankage and no ability to install a new off-loading facility. Because of the safety considerations associated with refueling the tanks via trucks at a location within the airport, the Department will allow KIAC to continue to utilize the existing source of low sulfur distillate oil (jet fuel with a maximum sulfur content is 0.091%) for its operation.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 1 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.091 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-3: Compliance Certification**
**Effective for entire length of Permit**

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

**Item 1-3.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS
Process: BSG Emission Source: BSDG2

**Item 1-3.2:**
Compliance Certification shall include the following monitoring:

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

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

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-4: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 225-1.4 (a)**

**Item 1-4.1:**
The Compliance Certification activity will be performed for the Facility.

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

**Item 1-4.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
Compliance will be based on either vendor certification or on-site fuel sampling results. The method of compliance must be stated and/or listed for each calculation made.

Subpart 225-1.4(a) states for fuel mixtures or equivalent emission rate variances. Fuels with sulfur content greater than that allowed by Subpart 225 may be fired with demonstration that sulfur dioxide (SO2) emissions do not exceed the value for S calculated using the equation found in 225-1.4(a)

Fuels with sulfur content greater than that allowed by this Subpart may be fired when the facility owner can demonstrate that sulfur dioxide emissions do not exceed 1.1 x 0.0015 = 0.00165 lb/MMBTU.The facility will show compliance to Subpart 225-1.4(a) with the equation below:

Facility SO2 lb/MMBTU = (SO2NG x NG + SO2JA x JA + SO2ULSD x ULSD) / (NG+JA+ULSD) shall not exceed 0.00165 lb/MMBTU

Where:
SO2NG = Natural Gas SO2 rate (lb/MMBTU)
NG = annual Natural Gas usage (MMBTU)
SO2JA = Jet A fuel SO2 rate (lb/MMBTU)
JA = annual Jet A Fuel usage (MMBTU)
SO2ULSD = Ultra-Low Sulfur Distillate SO2 rate (lb/MMBTU)
ULSD = annual Ultra-Low Sulfur Distillate usage (MMBTU)

Compliance will be based on the total heat input from all fuels fired, including gaseous fuels

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: FUEL OIL
Parameter Monitored: SULFUR DIOXIDE
Upper Permit Limit: 0.00165 pounds per million Btus
Monitoring Frequency: ANNUALLY
Averaging Method: CALENDAR YEAR AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

**Condition 1-5: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 225-1.6 (b)**

**Item 1-5.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-5.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The owner or operator must retain on site or at a Department approved alternative location. Records containing the following information:

(i) fuel analyses and data on the quantities of all oil received; and
(ii) the names of all purchasers, fuel analyses, and data on the quantities of all oil sold.

Such fuel analyses must contain, as a minimum:

(i) data on the sulfur content, ash content, specific gravity, and heating value of residual oil;
(ii) data on the sulfur content, specific gravity, and heating value of the oil

Monitoring Frequency: PER DELIVERY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

**Condition 1-6: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 225-1.6 (b)**

**Item 1-6.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-6.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Any facility who sells oil, waste oil, and/or coal must retain on site or at a Department approved alternative location, for at least five years, records containing the following information:

(i) fuel analyses and data on the quantities of all oil, waste oil, and/or coal received; and
(ii) the names of all purchasers, fuel analyses, and data on the quantities of all oil, waste oil, and/or coal sold.

Such fuel analyses must contain, as a minimum:

(i) data on the sulfur content, ash content, specific gravity, and heating value of residual oil;
(ii) data on the sulfur content, specific gravity, and heating value of distillate oil and/or waste oil; and/or
(iii) data on the sulfur content, ash content, and heating value of coal.

Monitoring Frequency: PER DELIVERY
Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

**Condition 1-7: Compliance Certification**
**Effective for entire length of Permit**

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

**Item 1-7.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-7.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator must maintain records of excess emissions. The owner or operator must submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an exceedance(s) takes place. These records must be kept on site or at a Department approved alternative location for a minimum of five years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

**Condition 1-8: Compliance Certification**
**Effective for entire length of Permit**

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

**Item 1-8.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-8.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Any owner or operator of a stationary combustion installation (excluding combustion turbines) or a group of stationary combustion installations firing oil or oil in combination with other liquid or gaseous fuels with a total maximum heat input capacity of at least 50 million

Btus per hour is required to meet the 0.1 lbs/mmBtu particulate matter standard. Compliance with this standard will be met by keeping vendor certified fuel receipts which contain the sulfur content of the oil being fired as required in Subpart 225-1 of this Title.

Monitoring Frequency: PER DELIVERY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 47: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 47.1:**
The Compliance Certification activity will be performed for the Facility.

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

**Item 47.2:**
Compliance Certification shall include the following monitoring:

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

Any person who owns a stationary installation (excluding gas turbines), with a total maximum heat input capacity exceeding 250 million Btu per hour shall install, operate in accordance with manufacturer's instructions, and properly maintain, accurate instruments satisfying the criteria in appendix B of tile 40, part 60 of the Code of Federal Regulations, or approved by the commissioner on an individual case basis, for continously monitoring and recording opacity, and when sulfur dioxide continuous monitoring is required by Part 225 of this Title, for continuously monitoring and recording either the percent oxygen or carbon dioxide in the flue gses from such installations at all times that the combustion installation is in service. Where gas is the only fuel burned, monitoring and recording of opacity is not required.

KIAC is not required to install or maintain a continuous opacity monitor (COM) for monitoring the opacity. This is due to the fact that KIAC's turbines are equipped with a supplemental firing COEN duct burner and the duct burners are limited to natural gas firing only and the duct burners are below 250 MM Btu/hr and therefore; KIAC is also not required to monitor the opacity using COMS for

stationary combustion installations as per 6 NYCRR 227-1.7.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: METHOD 9
Monitoring Frequency: SEMI-ANNUALLY
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 50: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 50.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD1 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD1 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD1 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD1 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD1 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD1 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

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

**Item 50.2:**
Compliance Certification shall include the following monitoring:

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

The Compliance Certification applies to the six emergency boilers when firing natural gas or low sulfur distillate oil.

No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one-six-minute period per hour of not more than 27 percent opacity.

If low sulfur distillate oil is fired for operational purposes as opposed to testing purposes, in a particular emergency boiler during the semi-annual period, KIAC shall conduct a semi-annual Method 9 observation for that boiler when firing low sulfur distillate oil during the semi-annual period. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

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

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

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

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: SEMI-ANNUALLY
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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-9: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 227-1.4 (a)**

**Item 1-9.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-9.2:**
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 combustion installation subject to this Subpart shall operate an emission source which exhibits greater than 20 percent opacity (based on a six minute average), except for one 6 minute period per hour of not more than 27 percent opacity. The owner or operator will conduct a Method 9 test annually. A report of the results of the test will be submitted to the Department within 30 days of the completion of the Method 9 test. All records generated by the permittee must be maintained at the facility or at an alternative location approved by the Department for a minimum of five years.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: 40 CFR 60, Appendix A, Method 9
Monitoring Frequency: ANNUALLY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.

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

**Condition 1-10: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 227-1.4 (a)**

**Item 1-10.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 1-10.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Operators of oil firing emission sources subject to 6 NYCRR Subpart 227-1 which do not employ a continuous opacity monitor for measuring smoke emissions, shall be required to perform the following:

1) Observe the stack for each emission source 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 observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:

- date and time of day
- observer's name
- identity of the emission point
- weather conditions
- was a plume 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.

3) If the operator observes any visible emissions (other than steam - see below) for two consecutive days while 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 results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon

notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

** 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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 51: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 51.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 51.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator required to operate a COM shall submit an accurate excess emissions and monitoring system performance report to the Department for each calendar year quarter. All reports shall be certified by a responsible official as true, accurate and complete and post marked by the 30th day following the end of each calendar quarter. The quarterly excess emissions report shall be submitted in a form acceptable to the Department and shall include the following minimum information:

(i) the magnitude, date and time of each six-minute block average during which the average opacity of emissions exceeds 20 percent, except for one six-minute block average per hour not to exceed 27 percent;

(ii) identification of the specific cause and corrective action taken for each period of excess emission;

(iii) identification of all periods of COM down time,

including the date, time and duration of each inoperable period, and the cause and corrective action for each COM down time period;

(iv) the total time in which the COM is required to record data during the reporting period; and

(v) the total number of exceedances and the duration of exceedances expressed as a percentage of the total time in which the COM is required to record data.

All records generated by the permittee must be maintained at the facility or at an alternative location approved by the Department for a minimum of five years.

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 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 53: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 53.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD1 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD1 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD1 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD1 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD1 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD1 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG1 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG1 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG1 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG1 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG1 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG1 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

**Item 53.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
KIAC Cogeneration Plant at JFK Airport will keep records concerning fuel usage, emissions, and any pertinent data associated with all combustion installations and KIAC shall provide this data and emissions data when requested by the NYSDEC. Sampling, compositing and analysis of fuel samples shall be carried out in accordance with the most recent ASTM standard methods acceptable to NYSDEC.

Reference Test Method: ASTM Methods
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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 54: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 54.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT3 | Emission Source: DB001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT3 | Emission Source: GT001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT3 | Emission Source: SCR01 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT7 | Emission Source: GT001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT7 | Emission Source: SCR01 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT4 | Emission Source: DB002 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT4 | Emission Source: GT002 |
| Emission Unit: U-00002 | Emission Point: E0002 |

Process: GT4 Emission Source: SCR02

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: SCR02

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 54.2:**
Compliance Certification shall include the following monitoring:

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

This condition applies to the two 469 MM Btu/hr each GE LM 6000 PC SPRINT combustion turbine/HRSG units (Emission Sources GT001 & GT002) firing low sulfur distillate oil (Processes GT3 & GT4) with its corresponding duct burner (Emission Controls DB001 & DB002), and low sulfur distillate oil (Processes GT7 & GT8) without its corresponding duct burner and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 469 MM Btu/hr each GE LM 6000 PC SPRINT combustion turbine/HRSG units (Emission Sources GT001 & GT002) operate with or without their corresponding two duct burners (Emission Controls DB001 & DB002; respectively) in Emission Units U-00001 & U-00002.

The proposed NOx RACT limit is 18.0 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion turbines (Emission Sources GT001 & GT002) firing low sulfur distillate oil (Processes GT3 & GT4)

with their corresponding duct burner (Emission Control DB001 & DB002) and (Processes GT7 & GT8) without its correspong duct burner in Emission Units U-00001 & U-00002.

For combustion turbines with or without a duct burner, compliance with the NOx emission limit of 18.0 parts per million by volume (dry, corrected to 15% O2) when firing low sulfur distillate oil (Processes GT3, GT4, GT7 & GT8), will be based on the combination of the combustion turbine and the duct burner when both fire, and the combustion turbine alone when not duct-firing. The duct burner will never operate without its corresponding combustion turbine.

For units with a duct burner, compliance will be based on the combination of the turbine and the duct burner when both fire, and the turbine alone when not duct firing. Compliance with these emission limits shall be determined in accordance with section 227-2.6(a)(4) of this Subpart. Units determining compliance under section 227-2.6(a)(4) of this Subpart may opt to utilize CEMS under the provisions of section 227-2.6(b) of this Subpart apply, including the use of a 24 hour daily average (arithmetic mean).

The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG is required to control NOx emissions. In lieu of using water steam injection to control NOx emissions, the facility has chosen Continuous Emissions Monitoring System (CEMS) to monitor NOx and O2 on the duct burners/turbines associated with the combustion gas turbine in accordance with 40 CFR 60 Subpart GG, and with 6 NYCRR 227-2.6(a)(4) and (b).

Compliance with this emission limit must be determined with a 24 hour daily average (arithmetic mean) when the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for NOx and O2
Upper Permit Limit: 18.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Appendices B & F
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 55: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 55.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: DB001

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: SCR01

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: DB002

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: SCR02

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: SCR02

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 55.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
This condition applies to the two 469 MM Btu/hr each GE

LM 6000 PC SPRINT combustion turbine/HRSG units (Emission Sources GT001 & GT002) firing natural gas (Processes GT1 & GT2) with its corresponding duct burner (Emission Controls DB001 & DB002), and firing natural gas (Processes GT5 & GT6) without its corresponding duct burner and is applicable beginning July 1, 2014. The owner or operator shall submit a testing protocol to the Department for approval, a minimum of 30 days prior to the stack testing.

(3) For all combustion turbines that operate after July 1, 2014, the owner or operator of a combustion turbine with a maximum heat input rate of 10 million Btu per hour or greater must submit a proposal for RACT to be implemented that includes descriptions of:

(i) the available NOx control technologies, the projected effectiveness of the technologies considered, and the costs for installation and operation for each of the technologies; and

(ii) the technology and the appropriate emission limit selected as RACT considering the costs for installation and operation of the technology.

The two 469 MM Btu/hr each GE LM 6000 PC SPRINT combustion turbine/HRSG units (Emission Sources GT001 & GT002) operate with or without their corresponding two duct burners (Emission Controls DB001 & DB002; respectively) in Emission Units U-00001 & U-00002.

The proposed NOx RACT limit is 9.0 parts per million by volume (dry, corrected to 15% O2) for the combined cycle combustion turbines (Emission Sources GT001 & GT002) firing natural gas (Processes GT1 & GT2) with their corresponding duct burner (Emission Control DB001 & DB002) and (Processes GT5 & GT6) without its corresponding duct burner in Emission Units U-00001 & U-00002.

For combustion turbines with or without a duct burner, compliance with the NOx emission limit of 9.0 parts per million by volume (dry, corrected to 15% O2) when firing gas (Processes GT1, GT2, GT5 & GT6), will be based on the combination of the combustion turbine and the duct burner when both fire, and the combustion turbine alone when not duct-firing. The duct burner will never operate without its corresponding combustion turbine.

For units with a duct burner, compliance will be based on the combination of the turbine and the duct burner when both fire, and the turbine alone when not duct firing. Compliance with these emission limits shall be determined

in accordance with section 227-2.6(a)(4) of this Subpart. Units determining compliance under section 227-2.6(a)(4) of this Subpart may opt to utilize CEMS under the provisions of section 227-2.6(b) of this Subpart apply, including the use of a 24 hour daily average (arithmetic mean).

The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG is required to control NOx emissions. In lieu of using water steam injection to control NOx emissions, the facility has chosen Continuous Emissions Monitoring System (CEMS) to monitor NOx and O2 on the duct burners/turbines associated with the combustion gas turbine in accordance with 40 CFR 60 Subpart GG, and with 6 NYCRR 227-2.6(a)(2) and (b).

Compliance with this emission limit must be determined with a 24 hour daily average (arithmetic mean) when the owner or operator chooses to use a CEMS under the provisions of section 227-2.6(b) of this Subpart.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for NOx and CO2
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 9.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Appendices B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 62: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 62.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD1 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD1 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD1 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD1 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD1 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD1 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

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

**Item 62.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The two hour average emission of particulates from this stationary combustion installation shall not exceed 0.10 pounds per million Btu of heat input.

At the monitoring frequency stated below the facility shall perform the following:

1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the 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) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.

4) Facility shall keep records of all testing done at this stationary combustion installation for a period of 5 years.

Records shall be maintained at the facility for a minimum of five (5) years.

KIAC is required to conduct the two hour average emission of particulates from a particular boiler only if the particular boiler (HWG - hot water generator) fires jet fuel (# 1 distillate oil) - Processes BD1 or BD2 for operational purposes, as opposed to testing purposes during the term of the permit.

Also, the requirement to test applies on a particular boiler basis, rather than collectively.

The Particulate Emission Testing is required "Only if liquid fuel is burned during the term of the permit."

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: EPA RM 5
Monitoring Frequency: Once every five years
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 63: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 63.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: DB001

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: SCR01

Emission Unit: U-00001 Emission Point: E0001
Process: GT7 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT7 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: DB002

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: SCR02

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: SCR02

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

**Item 63.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

The two hour average emission of particulates from this stationary combustion installation shall not exceed 0.10 pounds per million Btu of heat input.

At the monitoring frequency stated below the facility shall perform the following:

1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the 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) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.

4) Facility shall keep records of all testing done at this stationary combustion installation for a period of 5 years.

Normally, the two combustion turbines (Emission Sources GT001 & GT002) operate on natural gas (Processes GT1, GT2, GT5 & GT6). In very rare occasions, the two combustion turbines operate on low sulfur distillate oil (Processes GT3, GT4, GT7 & GT8). KIAC is required to conduct the two hour average emission of particulates from a particular stationary combustion installation only if the particular turbine fires low sulfur distillate oil (Processes GT3, GT4, GT7 or GT8) for operational purposes, as opposed to testing purposes during the term of the permit.

Also, the requirement to test applies on an individual turbine basis, rather than collectively.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: EPA Method 5
Monitoring Frequency: Once every five years
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 1-11: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-2.7 (b)**

**Item 1-11.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001

Emission Unit: U-00002

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

**Item 1-11.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
CEMS are to be used to monitor CO emissions from the combustion turbine/HRSG without duct burners units while firing light distillate fuel oil in the combustion turbine and no duct burner unit.

This emission limit applies at all times, except during

periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

The CO emissions are limited to 8.4 pounds per hour, on an hourly average basis during low sulfur distillate oil firing in the combustion turbine and no duct burner unit. LAER is required in accordance with 6 NYCRR 231-2.7(b).

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the CO emissions from the combustion turbine without duct burner unit during low sulfur distillate oil firing in the combustion turbine and no duct burner unit.

KIAC will use CEMS to continuously monitor the CO emission at the stack.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 8.4 pounds per hour
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

**Condition 1-12: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-2.7 (b)**

**Item 1-12.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001

Emission Unit: U-00002

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

**Item 1-12.2:**

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing natural gas, Processes GT1 & GT5 for Emission Source GT001, and Processes GT2 & GT6 for Emission Source GT002.

The CO emissions are limited to 5.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during natural gas firing in the combustion turbine and no duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).
CEMS are to be used to monitor the CO emissions from the combustion turbine/HRSG without the duct burner unit during natural gas firing in the combustion turbine unit and no duct burner unit.
KIAC will use CEMS to continuously monitor the CO emission at the stack.

The CO emissions must be calculated based upon "all 24-hour daily heat input-weighted average CO emission rates from block hourly arithmetic emission rate averages calculated by the CEMS and expressed in terms of pounds of CO per million Btu.

Compliance with this emission limit must be determined as indicated above.

This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the CO emission limit of 5.0 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no

longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

Process CO Emission Limit

GT1 5.0 parts per million by volume (dry, corrected to 15% O2)
GT5 5.0 parts per million by volume (dry, corrected to 15% O2)
GT2 5.0 parts per million by volume (dry, corrected to 15% O2)
GT6 5.0 parts per million by volume (dry, corrected to 15% O2)

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 5.0 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

**Condition 1-13: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-2.7 (b)**

**Item 1-13.1:**
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-13.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing low sulfur distillate oil, Processes GT3 & GT7 for Emission Source GT001, and Processes GT4 & GT8 for Emission Source GT002.

This condition applies to Processes GT3, GT7, GT4 & GT8.

NYCRR 227-2.4(e)(2), the NOx emissions are limited to 18.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during low sulfur distillate oil firing in the combustion turbine and natural gas firing in the duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the NOx emissions from the combustion turbine/HRSG and duct burner units during low sulfur distillate oil firing in the combustion turbine and natural gas firing in the duct burner unit.

KIAC will use CEMS to continuously monitor the NOx emission at the stack.

According to 6 NYCRR 227-2.6(b)(3)(i)(a), the NOx emissions must be calculated based upon "all 24-hour daily heat input-weighted average NOx emission rates from block hourly arithmetic emission rate averages calculated by the CEMS and expressed in terms of pounds of NOx per million Btu. Compliance with this emission limit must be determined as indicated above.

This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the NOx emission limit of 18.0 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

Process NOx Emission Limit

GT3 18.0 parts per million by volume (dry, corrected to 15% O2)
GT7 18.0 parts per million by volume (dry, corrected to 15% O2)
GT4 18.0 parts per million by volume (dry, corrected to 15% O2)
GT8 18.0 parts per million by volume (dry, corrected to 15% O2)

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 18.0 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-14: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-2.7 (b)**

**Item 1-14.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001

Emission Unit: U-00002

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

**Item 1-14.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing low sulfur distillate oil, Processes GT3 & GT7 for Emission Source GT001, and Processes GT4 & GT8 for Emission Source

GT002.

Processes GT3 & GT7, GT4 & GT8

The CO emissions are limited to 7.5 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during low sulfur distillate oil firing in the combustion turbine/HRSG and natural gas with or without duct burner firing natural gas. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the CO emissions from the combustion turbine/HRSG and duct burner units during low sulfur distillate oil firing in the combustion turbine/HRSG with or without duct burner firing natural gas.

KIAC will use CEMS to continuously monitor the CO emission at the stack.

This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6NYCRR 201-1.4.

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the CO emission limit of 7.5 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

| Process | CO Emission Limit |
|---|---|
| GT3 | 7.5 parts per million by volume (dry, corrected to 15% O2) |
| GT7 | 7.5 parts per million by volume (dry, corrected to 15% O2) |

GT4 7.5 parts per million by volume (dry, corrected to 15% O2)
GT8 7.5 parts per million by volume (dry, corrected to 15% O2)

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 7.5 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

**Condition 1-15: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-2.7 (b)**

**Item 1-15.1:**
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-15.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing natural gas,Processes GT1 & GT5 for Emission Source GT001, and Processes GT2 & GT6 for Emission Source GT002.

In order to satisfy the requirements of 6 NYCRR 231-2.7 (b) and 6 NYCRR 227-2.4(e)(2), the NOx emissions are limited to 9.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during natural gas firing in the combustion turbine with or without duct burner firing natural gas. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the

requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b). Based upon a NOx RACT Compliance Plan dated November, 2012, these operational limits shall constitute RACT for purposes of 6 NYCRR 227-2.4(e)(2).

CEMS are to be used to monitor the NOx emissions from the combustion turbine/HRSG during natural gas firing in the combustion turbine unit with or without duct burner firing natural gas.

KIAC will use CEMS to continuously monitor the NOx emission at the stack.

This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the NOx emission limit of 9.0 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

| Process | NOx Emission Limit |
|---|---|
| GT1 | 9.0 parts per million by volume (dry, corrected to 15% O2) |
| GT5 | 9.0 parts per million by volume (dry, corrected to 15% O2) |
| GT2 | 9.0 parts per million by volume (dry, corrected to 15% O2) |
| GT6 | 9.0 parts per million by volume (dry, corrected to 15% O2) |

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 9.0 parts per million by volume

(dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-16: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-2.7 (b)**

**Item 1-16.1:**
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-16.2:**
Compliance Certification shall include the following monitoring:

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

In order to limit emissions below applicability thresholds for both 40 CFR 52.21 Prevention of Significant Deterioration (PSD) and 6NYCRR Part 231-2 New Source Review (NSR) requirements, annual emissions of Nitrogen Oxides (NOx) from Emission Unit B-OILRS shall not exceed 24 tons per year, on a rolling 12-month basis.

The NOx emissions for each of the six boilers shall be calculated on a monthly basis. Emission calculations shall be based upon the quantity of each fuel burned in the boilers. Monthly emissions shall be calculated for each boiler using the following methodology:

MN = Monthly Emissions of NOx from Boiler when firing Natural Gas (tons/month) = (Q N) (1,020 MMBtu/Mscf) (EF N) [ ton / 2000 lb]

Where,
Q N = Quantity of Natural Gas burned in Boiler in Mscf/ month,
EF N = the measured NOx emission rate for the Boiler in lb/MMBtu, as determined by the most recent stack test of the boiler or a representative boiler at the facility that has the same equipment manufacturer, make and model number.

MD = Monthly Emissions of NOx from Boiler when firing Light Distillate (tons/month) = (Q L) (135 MMBtu/Kgal) (EF L) [ ton / 2000 lb]

Where
Q L = Quantity of Light Distillate burned in Boiler in Kgal / month,
EF L = the measured NOx emission rate for the Boiler in lb/MMBtu, as determined by the most recent stack test of the boiler or a representative boiler at the facility that has the same equipment manufacturer, make and model number.

MT = Total Monthly Emissions of NOx from Boiler = MN + MD
MAll = Total Monthly Emissions of NOx from All Boilers = sum {MT for all boilers}

KIAC shall calculate the total monthly NOx emissions for each boiler (MT) on a monthly basis. The total monthly NOx emissions for each of the six boilers shall be summed to determine the total monthly emissions for all six boilers (MAll). A 12-month rolling total of NOx emissions for all six boilers shall be calculated each month.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 24 tons
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MINIMUM ROLLED MONTHLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 68: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 68.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT7 | Emission Source: GT001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT7 | Emission Source: SCR01 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT8 | Emission Source: GT002 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT8 | Emission Source: SCR02 |

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 68.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
In order to satisfy the requirements of 6 NYCRR 231-2.7 (b) and 6 NYCRR 227-2.4(e)(2), the NOx emissions are limited to 18.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during distillate oil firing in the combustion turbine and no duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b). Based upon a NOx RACT Compliance Plan dated November, 2012, these operational limits shall constitute RACT for purposes of 6 NYCRR 227-2.4(e)(2).

CEMS are to be used to monitor the NOx emissions from the combustion turbine without the duct burner unit during light distillate fuel oil firing in the combustion turbine and no duct burner unit.

KIAC will use CEMS to continuously monitor the NOx emission at the stack.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 18.0 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 72: Compliance Certification**

**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 72.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT7 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT7 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: SCR02

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

**Item 72.2:**
Compliance Certification shall include the following monitoring:

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

CEMS are to be used to monitor CO emissions from the combustion turbine/HRSG without duct burners unit while firing light distillate fuel oil.

The CO emissions are limited to 7.5 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during low sulfur distillate oil firing in the combustion turbine and no duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b).

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor CO emissions from the combustion turbine without duct burner unit during low sulfur distillate oil firing in the combustion turbine and no duct burner unit.

KIAC will use CEMS to continuously monitor CO emission at the stack.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five

years.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 7.5 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 73: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 73.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: DB001

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: DB002

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: SCR02

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

**Item 73.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
The CO emissions are limited to 5.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during natural gas firing in the combustion

turbine/HRSG and natural gas firing in the duct burner. This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the NOx emissions from the combustion turbine/HRSG and duct burner units during natural gas firing in the combustion turbine/HRSG and natural gas firing in the duct burner unit.

KIAC will use CEMS to continuously monitor the CO emission at the stack.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 74: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 74.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: SCR02

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 74.2:**
Compliance Certification shall include the following monitoring:

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

In order to satisfy the requirements of 6 NYCRR 231-2.7 (b) and 6 NYCRR 227-2.4(e)(2), the NOx emissions are limited to 9.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during natural gas firing in the combustion turbine and no duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b). Based upon a NOx RACT Compliance Plan dated November, 2012, these operational limits shall constitute RACT for purposes of 6 NYCRR 227-2.4(e)(2).

CEMS are to be used to monitor the NOx emissions from the combustion turbine/HRSG without the duct burner unit during natural gas firing in the combustion turbine unit and no duct burner unit.

KIAC will use CEMS to continuously monitor the NOx emission at the stack.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 9.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.

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

**Condition 75: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 75.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: DB001

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: DB002

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: SCR02

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

**Item 75.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
The CO emissions are limited to 7.5 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during low sulfur
distillate oil firing in the combustion turbine/HRSG and natural gas firing in the duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the CO emissions from the

combustion turbine/HRSG and duct burner units during low sulfur distillate oil firing in the combustion turbine/HRSG and natural gas firing in the duct burner unit.

KIAC will use CEMS to continuously monitor the CO emission at the stack.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 7.5 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 76: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 76.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT3 | Emission Source: DB001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT3 | Emission Source: GT001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT3 | Emission Source: SCR01 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT4 | Emission Source: DB002 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT4 | Emission Source: GT002 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT4 | Emission Source: SCR02 |

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 76.2:**
Compliance Certification shall include the following monitoring:

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

In order to satisfy the requirements of 6 NYCRR 231-2.7 (b) and 6 NYCRR 227-2.4(e)(2), the NOx emissions are limited to 18.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during low sulfur distillate oil firing in the combustion turbine and natural gas firing in the duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the NOx emissions from the combustion turbine/HRSG and duct burner units during low sulfur distillate oil firing in the combustion turbine and natural gas firing in the duct burner unit.

KIAC will use CEMS to continuously monitor the NOx emission at the stack.

According to 6 NYCRR 227-2.6(b)(3)(i)(a), the NOx emissions must be calculated based upon "all 24-hour daily heat input-weighted average NOx emission rates from block hourly arithmetic emission rate averages calculated by the CEMS and expressed in terms of pounds of NOx per million Btu.

Compliance with this emission limit must be determined as indicated above.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 18.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS

Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 77: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 77.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: SCR02

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

**Item 77.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
The CO emissions are limited to 5.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during natural gas firing in the combustion turbine and no duct burner. LAER is required in accordance with 6 NYCRR 231-2.7(b). This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the CO emissions from the combustion turbine/HRSG without the duct burner unit during natural gas firing in the combustion turbine unit and no duct burner unit.

KIAC will use CEMS to continuously monitor the CO emission at the stack.

The CO emissions must be calculated based upon "all 24-hour daily heat input-weighted average CO emission rates from block hourly arithmetic emission rate averages calculated by the CEMS and expressed in terms of pounds of CO per million Btu.

Compliance with this emission limit must be determined as indicated above.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 79: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 79.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: DB001

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: SCR01

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: DB002

Emission Unit: U-00002 Emission Point: E0002

Process: GT2 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: SCR02

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 79.2:**
Compliance Certification shall include the following monitoring:

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

In order to satisfy the requirements of 6 NYCRR 231-2.7 (b) and 6 NYCRR 227-2.4(e)(2), the NOx emissions are limited to 9.0 parts per million by volume (dry, corrected to 15% O2), on an hourly average basis during natural gas firing in the combustion turbine/HRSG and natural gas firing in the duct burner. This emission limit applies at all times, except during periods of start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4.

Operation of the source in this manner shall constitute LAER for purposes of 6 NYCRR 231-2.7 (b).

CEMS are to be used to monitor the NOx emissions from the combustion turbine/HRSG and duct burner units during natural gas firing in the combustion turbine/HRSG and natural gas firing in the duct burner unit.

KIAC will use CEMS to continuously monitor the NOx emission at the stack.

According to 6 NYCRR 227-2.6(b)(3)(i)(a), the NOx emissions must be calculated based upon "all 24-hour daily heat input-weighted average NOx emission rates from block hourly arithmetic emission rate averages calculated by the CEMS and expressed in terms of pounds of NOx per million Btu.

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 9.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Part 60 Appendix B & F
Monitoring Frequency: CONTINUOUS

Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 80: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 80.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT1 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT5 Emission Source: GT001

Emission Unit: U-00002 Emission Point: E0002
Process: GT2 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: GT002

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 80.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing natural gas,Processes GT1 & GT5 for Emission Source GT001, and Processes GT2 & GT6 for Emission Source GT002.

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the NOx emission limit of 9.0 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator

engine or a subsequent start is initiated.

| Process | NOx Emission Limit |
|---|---|
| GT1 | 9.0 parts per million by volume (dry, corrected to 15% O2) |
| GT5 | 9.0 parts per million by volume (dry, corrected to 15% O2) |
| GT2 | 9.0 parts per million by volume (dry, corrected to 15% O2) |
| GT6 | 9.0 parts per million by volume (dry, corrected to 15% O2) |

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 9.0 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 81: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 81.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT1 | Emission Source: GT001 |
| Emission Unit: U-00001 | Emission Point: E0001 |
| Process: GT5 | Emission Source: GT001 |
| Emission Unit: U-00002 | Emission Point: E0002 |
| Process: GT2 | Emission Source: GT002 |

Emission Unit: U-00002 Emission Point: E0002
Process: GT6 Emission Source: GT002

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

**Item 81.2:**
Compliance Certification shall include the following monitoring:

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

This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing natural gas, Processes GT1 & GT5 for Emission Source GT001, and Processes GT2 & GT6 for Emission Source GT002.

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the CO emission limit of 5.0 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

Process CO Emission Limit

GT1 5.0 parts per million by volume (dry, corrected to 15% O2)

GT5 5.0 parts per million by volume (dry, corrected to 15% O2)

GT2 5.0 parts per million by volume (dry, corrected to 15% O2)

GT6 5.0 parts per million by volume (dry, corrected to 15% O2)

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 5.0 parts per million by volume

(dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 82: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 82.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT7 Emission Source: GT001

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: GT002

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

**Item 82.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing low sulfur distillate oil, Processes GT3 & GT7 for Emission Source GT001, and Processes GT4 & GT8 for Emission Source GT002.

Processes GT3 & GT7, GT4 & GT8

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the CO emission limit of 7.5 parts

per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

Process CO Emission Limit

GT3 7.5 parts per million by volume (dry, corrected to 15% O2)

GT7 7.5 parts per million by volume (dry, corrected to 15% O2)

GT4 7.5 parts per million by volume (dry, corrected to 15% O2)

GT8 7.5 parts per million by volume (dry, corrected to 15% O2)

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 7.5 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 1-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2022.
Subsequent reports are due every 3 calendar month(s).

**Condition 83: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 83.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001
Process: GT3 Emission Source: GT001

Emission Unit: U-00001 Emission Point: E0001
Process: GT7 Emission Source: GT001

Emission Unit: U-00002 Emission Point: E0002
Process: GT4 Emission Source: GT002

Emission Unit: U-00002 Emission Point: E0002
Process: GT8 Emission Source: GT002

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 83.2:**
Compliance Certification shall include the following monitoring:

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

This condition applies to the two combustion turbines (Emission Sources GT001 & GT002) when firing low sulfur distillate oil, Processes GT3 & GT7 for Emission Source GT001, and Processes GT4 & GT8 for Emission Source GT002.

This condition applies to Processes GT3, GT7, GT4 & GT8.

Start-up is defined as the period that begins when the combustion turbine generator engine is first fired with fuel and ends when the control equipment operation has achieved and maintained the NOx emission limit of 18.0 parts per million by volume (dry, corrected to 15% O2) on a 1-hour block basis, not to exceed 3 hours.

Shutdown is defined as the period of time not to exceed 3 hours when the stop signal is initiated to when fuel is no longer combusted in the combustion turbine generator engine or a subsequent start is initiated.

Process NOx Emission Limit

GT3 18.0 parts per million by volume (dry, corrected to 15% O2)

GT7 18.0 parts per million by volume (dry, corrected to 15% O2)

GT4 18.0 parts per million by volume (dry, corrected to 15% O2)

GT8 18.0 parts per million by volume (dry, corrected to 15% O2)

All records used to determine compliance with the applicable limit (s) must be kept at the facility (or other Department approved location) for a minimum of five years.

Manufacturer Name/Model Number: CEMS for GE MODEL LM6000
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 18.0 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: See Monitoring Description Above
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-17: Compliance Certification**
**Effective for entire length of Permit**

**Applicable Federal Requirement:6 NYCRR 231-6.2**

**Item 1-17.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG07

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG08

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG09

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG10

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG11

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG07

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG08

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG09

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG10

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG11

Emission Unit: B-OILRS
Process: BSG Emission Source: BSDG2

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-17.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The total NOx emissions from this project shall not exceed 14.68 tons per year. The facility shall monthly calcuate the five new HWGs emissions with the following formula:

(Ab+Cd+EfH/G)/2000 <= 14.68 tpy of NOx condition limit

A = Emission Factor for the HWGs burning Natural Gas (Most recent stack test verifed emisson factor) (0.0105 lb/mmBTU provided by the vendor)
b = Amount of Natural Gas burned by the HWGs (mmBTU/yr, rolled monthly)
C = Emission factor for the HWGs burning Jet Fuel A Oil (Most recent stack test verifed emisson factor) (0.076 lb/mmBTU provided by the vendor)
d = Amount of Jet Fuel A Oil burned by the facility for the HWGs (mmBTU/yr,rolled monthly)
E = Emission Factor for the Black Start Emergency Generator burning Jet Fuel A Oil (via EPA Certificate of Conformity) (4.56 g/hp-hr provided by the vendor)
f = Hours of operation per year by the facility for Black Start Emergency Generator (hrs/yr)
G = Conversion factors (453.6 g/lb)
H = Breakhorse Power of the Emergency Generator (2937 bhp)

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 14.68 tons per year
Monitoring Frequency: MONTHLY

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 84: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 84.1:**
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 84.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Baseline Emissions:

A period of time used to quantify a credible emission increase. The baseline period consists of any 24 consecutive months within the five years immediately preceding the date of receipt by the Department of the permit application. The baseline (24 months over last 5 years) period of calendar year 2016 and 2017 was selected to assure the full 24-months block is within the 5-year period and to include relative high amount of operation and NOx emissions for a conservative analysis.

Operating Hours and their NOx emissions for the last 5 years:

| Year | Operating Hours | NOx Emissions(tons) |
|---|---|---|
| 2015 | 14,151 | 74.2 |
| 2016 | 13,864 | 77.7 |
| 2017 | 12,133 | 69.0 |
| 2018 | 12,489 | 72.0 |
| 2019 | 10,852 | 58.5 |

For the 2016-2017 baseline period, GT001 and GT002 averaged 5,358 hours/year meeting the thresholds for TP operation out of a two-year average of 12,998 hours/year of total operation for the two combustion turbine units. These projected future actual TP operating hours were multiplyed by the 23.3 MM BTU/hr increase in combustion turbine generator (CTG) firing rate and multiplied by emission factors for NOx, VOC and other criteria

pollutants to calculate the projected total annual emissions increases or the two combustion turbines units.
Projected Annual Emissions Increases for TP Upgrade:

| Pollutant | Tons/year |
|---|---|
| NOx | 2.01 |
| VOC | 0.24 |
| CO | 0.28 |
| SO2 | 0.05 |
| PM/PM-10 | 0.5 |
| CO2 | 9,503 |
| H2SO4 | 0.007 |
| Lead | 0.000 |

Based on the above analysis, the project emission potential (PEP), based on a comparison of past actual to projected future emissions, does not equal or exceed the applicable significant project thresholds (2.5 tpy of NOx or VOC) under Part 231 or PSD significant emission rate thresholds. The project is therefore considered a minor modification and is subject to the provisions of section 231-11.2 of Part 231 and provisions of Subpart 231-6 (Title V Facility Permit), for a minor permit modification that does not trigger a New Source Review modification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 86: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**

**Item 86.1:**
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 86.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
For a modification with a project emission potential, calculated utilizing projected actual emissions, which does not equal or exceed the applicable significant project threshold in Table 3 or Table 4 of Subpart 231-13

of this Part, the facility owner or operator must comply with the provisions of sction 231-11.2 of this part.

The applicable portions of Subpart 231-13 Tables and Emission Thresholds are provided here. In particular, Table 3 specifies significant project threshold, significant net emission increase thresholds, and offset ratios for ozone non-attainment areas and the ozone transport region.

Subpart 231-13 Table 3

| Area Classification | Contaminant | Significant Project Thresholds (tpy) | Significant Net Emission Increase | Offset Ratio Threshold (tpy) |
|---|---|---|---|---|
| Severe | | | | |
| | VOC | 2.5 | >25 | At least 1.3:1 |
| | NOx | 2.5 | >25 | At least 1.3:1 |

The Significant Project Thresholds is the Project Potential Thresholds (PEP).

The following analysis is provided:

Past actual (baseline) emissions are selected based on a 24-month period from the previous 5 years.

An applicability determination according to Part 231 involving comparison of past actual to projected future actual emissions.

Projected future actual emissions take into account projected future operations, but default to the same operation/demand as for the baseline period, except for the increases associated with the upgrade. Increases due to increased demand would typically be excluded as "could have accomodated" emissions.

Significant Project Threshold:
The project does not change any permitted emission limits and has an actual emission increase below the Part 231 thresholds of 2.5 tons/yr for NOx and VOC, and therefore does not trigger New Source Review (NSR) and requires only a Title V minor modification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-18: Date of construction notification - If a COM is not used.**
**Effective for entire length of Permit**

**Applicable Federal Requirement:40CFR 60.7(a), NSPS Subpart A**

**Item 1-18.1:**
This Condition applies to:

Emission Unit: BOILRS

**Item 1-18.2:**
Any owner or operator subject to this part shall furnish the Administrator with the following information:

1) a notification of the date construction or reconstruction commenced, post marked no later than 30 days after such date;

2) [reserved]

3) a notification of the actual date of initial start up, post marked within 15 days after such date;

4) a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under this part. The notice shall be post marked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capability of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional information regarding the change;

5) a notification of the date upon which the demonstration of continuous monitoring system performance commences, post marked not less than 30 days prior to such date;

6) a notification of the anticipated date for conducting the opacity observations, post marked not less than 30 days prior to such date.

**Condition 94: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.7(a), NSPS Subpart A**

**Expired by Mod 1**

**Item 94.1:**
The Compliance Certification activity will be performed for the Facility.

**Item 94.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Any owner or operator subject to this part shall furnish the Administrator with the following information:

1) a notification of the date construction or reconstruction commenced, postmarked no later than 30 days after such date;

2) a notification of the actual date of initial start up, postmarked within 15 days after such date;

3) a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under 40 CFR 60. The notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capability of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional information regarding the change; Permit ID: 2-6308-00096/00009 Facility DEC ID: 2-6308-00096 Air Pollution Control Permit Conditions Renewal 1 Page 65 FINAL

4) a notification of the date upon which the demonstration of continuous monitoring system performance commences, postmarked not less than 30 days prior to such date;

5) a notification of the anticipated date for conducting the opacity observations, postmarked not less than 30 days prior to such date; and

6) a notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during the performance test, postmarked not less than 30 days prior to the performance test.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 107: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

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

**Expired by Mod 1**

**Item 107.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: U-00001 Emission Point: E0001

Emission Unit: U-00002 Emission Point: E0002

**Item 107.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner and operator of each affected facility shall submit notification of the date of construction or reconstruction, and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

Monitoring Frequency: SINGLE OCCURRENCE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2023.
Subsequent reports are due every 12 calendar month(s).

**Condition 1-19: Compliance Certification**
**Effective for entire length of Permit**

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

**Item 1-19.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS
Process: BD4

Emission Unit: B-OILRS
Process: BG3

**Item 1-19.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-20: Applicability**
**Effective for entire length of Permit**

**Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII**

**Item 1-20.1:**
This Condition applies to:

Emission Unit: BOILRS
Process: BSG Emission Source: BSDG2

**Item 1-20.2:**
Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

**Condition 110: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63, Subpart A**

**Expired by Mod 1**

**Item 110.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020

Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 110.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Under Processes BG2 and BD2, the affected boiler(s) no longer qualify as a “gas fired boiler” and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A “gas-fired boiler” is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a “gas fired boiler”, the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

Owners or operators of affected sources which are subject to 40 CFR Part 63 must comply with the applicable requirements of 40 CFR 63 Subpart A, as defined by the specific MACT regulation. The KIAC facility is subject to the requirements of 40 CFR 63 Subpart A as defined in the following MACT tables:

40 CFR 63 Subpart JJJJJJ, Table 8 [Part 63.11235]

Subpart A (the General Provisions for the NESHAP for Source Categories regulations) contains requirements for performance testing, monitoring, notification, recordkeeping, reporting, and control devices that may apply to the source.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-21: Applicability**
**Effective for entire length of Permit**

**Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ**

**Item 1-21.1:**
Facilities that are area sources of HAP with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 63 JJJJJJ.

**Condition 1-22: Boilers not subject**
**Effective for entire length of Permit**

**Applicable Federal Requirement:40CFR 63.11195, NESHAP Subpart JJJJJJ**

**Item 1-22.1:**
The types of boilers listed in paragraphs (a) through (k) are not subject to 40 CFR 63 Subpart JJJJJJ and to any requirements in that subpart.

(a) Any boiler specifically listed as, or included in the definition of, an affected source in another standard(s) under Part 63.

(b) Any boiler specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act.

(c) A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers).

(d) A boiler that is used specifically for research and development. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption to apply.

(e) A gas-fired boiler as defined in 40 CFR 63 Subpart JJJJJJ.

(f) A hot water heater as defined in 40 CFR 63 Subpart JJJJJJ.

(g) Any boiler that is used as a control device to comply with another Subpart of Part 63, or Part 60, Part 61, or Part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler is provided by regulated gas streams that are subject to another standard.

(h) Temporary boilers as defined in 40 CFR 63 Subpart JJJJJJ.

(i) Residential boilers as defined in 40 CFR 63 Subpart JJJJJJ.

(j) Electric boilers as defined in 40 CFR 63 Subpart JJJJJJ.

(k) An electric utility steam generating unit (EGU) as defined in subpart JJJJJJ.

**Condition 111: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11201(b), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 111.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: B-OILRS<br>Process: BD2 | Emission Point: 00015<br>Emission Source: HWG01 |
| Emission Unit: B-OILRS<br>Process: BD2 | Emission Point: 00016<br>Emission Source: HWG02 |
| Emission Unit: B-OILRS<br>Process: BD2 | Emission Point: 00017<br>Emission Source: HWG03 |
| Emission Unit: B-OILRS<br>Process: BD2 | Emission Point: 00018<br>Emission Source: HWG04 |
| Emission Unit: B-OILRS<br>Process: BD2 | Emission Point: 00019<br>Emission Source: HWG05 |
| Emission Unit: B-OILRS<br>Process: BD2 | Emission Point: 00020<br>Emission Source: HWG06 |
| Emission Unit: B-OILRS<br>Process: BG2 | Emission Point: 00015<br>Emission Source: HWG01 |
| Emission Unit: B-OILRS<br>Process: BG2 | Emission Point: 00016<br>Emission Source: HWG02 |

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 111.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Under Processes BG2 and BD2, the affected boiler(s) in Emission Unit B-OILRS no longer qualify as "gas fired boiler" and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a "gas fired boiler", the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

Within 180 days of becoming subject to this Subpart, KIAC shall conduct a one-time energy assessment that meets or is amended to meet the energy assessment requirements in Table 2 of 40 CFR 63 Subpart JJJJJJ.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 112: Compliance Certification**

**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11201(b), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 112.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 112.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Under Processes BG2 and BD2, the affected boiler(s) in Emission Unit B-OILRS no longer qualify as "gas fired boiler" and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a "gas fired boiler", the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

Within 180 days of becoming subject to this Subpart, KIAC shall conduct an initial tune-up of the existing affected boiler (s) as specified in Part 63.11214, and conduct a tune-up of the affected boiler (s) biennially as specified in Part 63.11223 (b).

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 113: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11205(a), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 113.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 113.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Under Processes BG2 and BD2, the affected boiler(s) in Emission Unit B-OILRS no longer qualify as "gas fired boiler" and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A “gas-fired boiler” is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a “gas fired boiler”, the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

At all times KIAC must operate and maintain the affected boiler(s), including associated air pollution control

equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 114: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11214(c), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 114.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: B-OILRS | Emission Point: 00015 |
| Process: BD2 | Emission Source: HWG01 |
| Emission Unit: B-OILRS | Emission Point: 00016 |
| Process: BD2 | Emission Source: HWG02 |
| Emission Unit: B-OILRS | Emission Point: 00017 |
| Process: BD2 | Emission Source: HWG03 |
| Emission Unit: B-OILRS | Emission Point: 00018 |
| Process: BD2 | Emission Source: HWG04 |
| Emission Unit: B-OILRS | Emission Point: 00019 |
| Process: BD2 | Emission Source: HWG05 |
| Emission Unit: B-OILRS | Emission Point: 00020 |
| Process: BD2 | Emission Source: HWG06 |
| Emission Unit: B-OILRS | Emission Point: 00015 |
| Process: BG2 | Emission Source: HWG01 |
| Emission Unit: B-OILRS | Emission Point: 00016 |
| Process: BG2 | Emission Source: HWG02 |

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 114.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Under Processes BG2 and BD2, the affected boiler(s) in Emission Unit B-OILRS no longer qualify as "gas fired boiler" and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a "gas fired boiler", the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

KIAC must submit a signed certification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 of 40 CFR 63 Subpart JJJJJJ and is an accurate depiction of this facility.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 115: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11223(b), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 115.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 115.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Under Processes BG2 and BD2, the affected boiler(s) in Emission Unit B-OILRS no longer qualify as a “gas fired boiler” and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A “gas-fired boiler” is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a “gas fired boiler”, the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

Emission Sources HWG02 and HWG03 are not equipped with an oxygen trim system. In order to comply with the requirements of 40 CFR 63.11223 (a) through (c), then KIAC must conduct a performance tune-up of the affected boiler(s) biennially. Each biennial tune-up must be

conducted no more than 25 months after the previous tune-up.

Each biennial tune-up must be conducted while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each biennial tune-up must be conducted as follows:

(1) Inspect the burner, and clean or replace any components of the burner as necessary. KIAC may delay the burner inspection until the next scheduled boiler shutdown, however; each burner must be inspected at least once every 36 months).

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (KIAC may delay the inspection of the system until the next scheduled boiler shutdown, however; the system controlling the air-to-fuel ratio must be inspected at least once every 36 months).

(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.
(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.
(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit

was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. Records shall be maintained which identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. In order to comply with recordkeeping requirements of 40 CFR 63.11225 (d), records must be in form suitable and readily available for expeditious review. Records shall be retained for five years and made available to the Agency upon request. Records for the most recent two year period shall be maintained on-site or be accessible at the site. Records for the remaining three years may be kept offsite.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 116: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11223(c), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 116.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

| | |
|---|---|
| Emission Unit: B-OILRS | Emission Point: 00015 |
| Process: BD2 | Emission Source: HWG01 |
| Emission Unit: B-OILRS | Emission Point: 00018 |
| Process: BD2 | Emission Source: HWG04 |
| Emission Unit: B-OILRS | Emission Point: 00019 |
| Process: BD2 | Emission Source: HWG05 |
| Emission Unit: B-OILRS | Emission Point: 00020 |
| Process: BD2 | Emission Source: HWG06 |
| Emission Unit: B-OILRS | Emission Point: 00015 |
| Process: BG2 | Emission Source: HWG01 |
| Emission Unit: B-OILRS | Emission Point: 00018 |
| Process: BG2 | Emission Source: HWG04 |

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 116.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Under Processes BG2 and BD2, the affected boiler(s) in Emission Unit B-OILRS no longer qualify as a "gas fired boiler" and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a "gas fired boiler", the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

Emission Sources HWG01, HWG04, HWG05 and HWG06 are equipped with an oxygen trim system that maintains an optimum air-to-fuel ratio. In order to comply with the requirements of 40 CFR 63.11223 (a) through (c), KIAC must conduct a performance tune-up of the affected boiler(s) every 5 years. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

Each 5-year tune-up must be conducted while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. Each 5-year tune-up must be conducted as follows:

(1) Inspect the burner, and clean or replace any components of the burner as necessary. KIAC may delay the burner inspection until the next scheduled boiler shutdown, however; each burner must be inspected at least once every 72 months).

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. (KIAC may delay the inspection of the system until the next scheduled boiler shutdown, however; the system controlling the air-to-fuel ratio must be inspected at least once every 72 months).

(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.

(5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.
(i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.
(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

Records shall be maintained which identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 118: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11225(b), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 118.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 118.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Under Processes BG2 and BD2, the affected boiler(s) no longer qualify as a "gas fired boiler" and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a "gas fired boiler", the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

In order to comply with the requirements of 40 CFR 63.11225 (b), KIAC must prepare, by March 1 following the biennial compliance period, and submit to the delegated authority upon request, a biennial compliance report for the previous compliance period containing the information identified below.

(1) Company name and address.
(2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

(ii) For units that do not qualify for a statutory exemption as provided in section 129 (g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(iii) "This facility complies with the requirement in §§63.11214 (d) and 63.11223 (g) to minimize the boiler's

time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

Records shall be maintained for five years and made available to the Agency upon request.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

**Condition 119: Compliance Certification**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 63.11225(d), Subpart JJJJJJ**

**Expired by Mod 1**

**Item 119.1:**
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: B-OILRS Emission Point: 00015
Process: BD2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BD2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BD2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BD2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BD2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BD2 Emission Source: HWG06

Emission Unit: B-OILRS Emission Point: 00015
Process: BG2 Emission Source: HWG01

Emission Unit: B-OILRS Emission Point: 00016
Process: BG2 Emission Source: HWG02

Emission Unit: B-OILRS Emission Point: 00017
Process: BG2 Emission Source: HWG03

Emission Unit: B-OILRS Emission Point: 00018
Process: BG2 Emission Source: HWG04

Emission Unit: B-OILRS Emission Point: 00019
Process: BG2 Emission Source: HWG05

Emission Unit: B-OILRS Emission Point: 00020
Process: BG2 Emission Source: HWG06

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

**Item 119.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Under Processes BG2 and BD2, the affected boiler(s) no longer qualify as a “gas fired boiler” and are subject to the requirements of 40 CFR 63 Subpart JJJJJJ (Boiler MACT for area sources). A “gas-fired boiler” is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns low sulfur distillate oil only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. (Periodic testing of low sulfur distillate oil shall not exceed a combined total of 48 hours during any calendar year). If a boiler fires low sulfur distillate oil after March 21, 2014 (the regulatory compliance date for Boiler MACT for area sources) during periods other than provided for under the definition of a “gas fired boiler”, the boiler will be subject to the requirements of 40 CFR 63 Subpart JJJJJJ and must comply with this permit condition.

The owner’s or operator’s records must be in a form suitable and readily available for expeditious review. The owner or operator must keep each record for 5 years following the date of each recorded action. The owner or operator must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The owner or operator may keep the records off site for the remaining 3 years.

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 10/30/2022.
Subsequent reports are due every 6 calendar month(s).

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

**Condition 123: Emission Point Definition By Emission Unit**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

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

**Item 123.1(From Mod 1):**
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: B-OILRS

Emission Point: 00021
Height (ft.): 42 Diameter (in.): 36
NYTMN (km.): 4500.292 NYTME (km.): 602.76 Building: COGENB

Emission Point: 00022
Height (ft.): 42 Diameter (in.): 36
NYTMN (km.): 4500.298 NYTME (km.): 602.757 Building: COGENB

Emission Point: 00023
Height (ft.): 42 Diameter (in.): 36
NYTMN (km.): 4500.306 NYTME (km.): 602.753 Building: COGENB

Emission Point: 00024
Height (ft.): 42 Diameter (in.): 36
NYTMN (km.): 4500.312 NYTME (km.): 602.749 Building: COGENB

Emission Point: 00025
Height (ft.): 42 Diameter (in.): 36
NYTMN (km.): 4500.318 NYTME (km.): 602.743 Building: COGENB

**Item 123.2(From Mod 1):**
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00001

Emission Point: E0001
Height (ft.): 110 Diameter (in.): 114
NYTMN (km.): 4500.253 NYTME (km.): 602.718 Building: COGENB

**Item 123.3(From Mod 1):**
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00002

Emission Point: E0002
Height (ft.): 110 Diameter (in.): 114
NYTMN (km.): 4500.262 NYTME (km.): 602.734 Building: COGENB

**Item 123.4(From Mod 0):**
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: B-OILRS

Emission Point: 00015
Height (ft.): 35 Diameter (in.): 66
NYTMN (km.): 4500.288 NYTME (km.): 602.764 Building: COGENB

Emission Point: 00016
Height (ft.): 39 Diameter (in.): 48
NYTMN (km.): 4500.295 NYTME (km.): 602.76 Building: COGENB

Emission Point: 00017
Height (ft.): 39 Diameter (in.): 48
NYTMN (km.): 4500.301 NYTME (km.): 602.756 Building: COGENB

Emission Point: 00018
Height (ft.): 35 Diameter (in.): 66
NYTMN (km.): 4500.308 NYTME (km.): 602.753 Building: COGENB

Emission Point: 00019
Height (ft.): 39 Diameter (in.): 48
NYTMN (km.): 4500.314 NYTME (km.): 602.749 Building: COGENB

Emission Point: 00020
Height (ft.): 39 Diameter (in.): 48
NYTMN (km.): 4500.321 NYTME (km.): 602.745 Building: COGENB

**Condition 124: Process Definition By Emission Unit**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

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

**Item 124.1(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-OILRS
Process: BD1 Source Classification Code: 1-03-004-02
Process Description:
Process BD1 is when the six boilers are firing jet fuel. Use of low sulfur distillate oil is limited to periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. Periodic testing of low sulfur distillate oil does not exceed a total of 48 hours during any calendar year for each of the six emergency boilers (Emission Sources HWG01, HWG02, HWG03, HWG04, HWG05 & HWG06) in Emission Unit B-OILRS).

Emission Source/Control: HWG01 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG02 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG03 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG04 - Combustion
Design Capacity: 75 million Btu per hour

Emission Source/Control: HWG05 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWG06 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWGC1 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC4 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC5 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC6 - Control
Control Type: OXYGEN TRIM SYSTEM

**Item 124.2(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-OILRS
Process: BD4 Source Classification Code: 1-03-005-01
Process Description:
Process BD4 is when the HWGs are firing Jet Fuel A, where they qualify as "Gas-Only" units, Use of Jet A Fuel oil is limited to periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel must not exceed a total of 48 hours during any calendar year for each of the five new HWGs (Emission Sources HWG07, HWG08, HWG09, HWG10, HWG11).

Emission Source/Control: HWG07 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG08 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG09 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG10 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG11 - Combustion
Design Capacity: 61.235 million Btu per hour

**Item 124.3(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-OILRS
Process: BG1 Source Classification Code: 1-03-006-02
Process Description:
Process BG1 is when the six boilers are firing natural gas (Use of low sulfur distillate oil is limited to periods of gas curtailment, gas supply interruption, startups, or periodic testing on low sulfur distillate oil. Periodic testing of low sulfur distillate oil does not exceed a combined total of 48 hours during any calendar year).

Emission Source/Control: HWG01 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG02 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG03 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG04 - Combustion
Design Capacity: 75 million Btu per hour

Emission Source/Control: HWG05 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWG06 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWGC1 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC4 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC5 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC6 - Control
Control Type: OXYGEN TRIM SYSTEM

**Item 124.4(From Mod 1):**

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

Emission Unit: B-OILRS
Process: BG3 Source Classification Code: 1-03-006-02
Process Description:
Process BG3 is when the HWGs are firing natural gas, where the boilers qualify as "Gas-Only" units. Use of Jet Fuel A is limited to periods of gas curtailment, gas supply interruption, startups, or periodic testing on Jet Fuel A. Periodic testing of low sulfur distillate oil does not exceed a combined total of 48 hours during any calendar year for each of the five new HWGs (Emission Sources HWG07, HWG08, HWG09, HWG10, HWG11).

Emission Source/Control: HWG07 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG08 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG09 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG10 - Combustion
Design Capacity: 61.235 million Btu per hour

Emission Source/Control: HWG11 - Combustion
Design Capacity: 61.235 million Btu per hour

**Item 124.5(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-OILRS
Process: BSG Source Classification Code: 2-03-001-01
Process Description:
This process is when the Black Start Diesel Generator (Caterpillar 3516C) burns ultra low sulfur distillate oil.

Emission Source/Control: BSDG2 - Combustion
Design Capacity: 2,000 kilowatts

**Item 124.6(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001
Process: GT1 Source Classification Code: 2-02-002-03
Process Description:
Process GT1 is the firing of natural gas in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT001) with supplemental firing of the duct burner (Emission Source DB001) in Emission Unit U-00001. The

combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The duct burner (Emission Source DB001) is limited to natural gas firing. The combustion turbine/duct burner unit vents through a stack, identified as Emission Point E0001, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR01) as an emission control.

Emission Source/Control: DB001 - Combustion
Design Capacity: 249 million Btu per hour

Emission Source/Control: GT001 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR01 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.7(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001
Process: GT3 Source Classification Code: 2-02-001-03
Process Description:

Process GT3 is the firing of low sulfur distillate oil in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT001) with supplemental firing of the duct burner (Emission Source DB001) in Emission Unit U-00001. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The duct burner (Emission Source DB001) is limited to natural gas firing. The combustion turbine/duct burner unit vents through a stack, identified as Emission Point E0001, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR01) as an emission control.

Low sulfur distillate oil firing is limited to 4.8 million gallons per year per combustion turbine (Emission Source GT001).

Emission Source/Control: DB001 - Combustion
Design Capacity: 249 million Btu per hour

Emission Source/Control: GT001 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR01 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.8(From Mod 1):**

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

Emission Unit: U-00001
Process: GT5 Source Classification Code: 2-02-002-03
Process Description:
Process GT5 is the firing of natural gas in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT001) with no supplemental firing of the duct burner (Emission Source DB001) in Emission Unit U-00001. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The combustion turbine unit vents through a stack, identified as Emission Point E0001, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR01) as an emission control.

Emission Source/Control: GT001 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR01 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.9(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001
Process: GT7 Source Classification Code: 2-02-001-03
Process Description:
Process GT7 is the firing of low sulfur distillate oil in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT001) with no supplemental firing of the duct burner (Emission Source DB001) in Emission Unit U-00001. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The combustion turbine unit vents through a stack, identified as Emission Point E0001, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR01) as an emission control.

Low sulfur distillate oil firing is limited to 4.8 million gallons per year per combustion turbine (Emission Source GT001).

Emission Source/Control: GT001 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR01 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.10(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00002
Process: GT2 Source Classification Code: 2-02-002-03
Process Description:
Process GT2 is the firing of natural gas in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT002) with supplemental firing of the duct burner (Emission Source DB002) in Emission Unit U-00002. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The duct burner (Emission Source DB002) is limited to natural gas firing. The combustion turbine/duct burner unit vents through a stack, identified as Emission Point E0002, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR02) as an emission control.

Emission Source/Control: DB002 - Combustion
Design Capacity: 249 million Btu per hour

Emission Source/Control: GT002 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR02 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.11(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00002
Process: GT4 Source Classification Code: 2-02-001-03
Process Description:
Process GT4 is the firing of low sulfur distillate oil in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT002) with supplemental firing of the duct burner (Emission Source DB002) in Emission Unit U-00002. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The duct burner (Emission Source DB002) is limited to natural gas firing. The combustion turbine/duct burner unit vents through a stack, identified as Emission Point E0002, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR02) as an emission control.

Low sulfur distillate oil firing is limited to 4.8 million gallons per year per combustion turbine (Emission Source GT002).

Emission Source/Control: DB002 - Combustion
Design Capacity: 249 million Btu per hour

Emission Source/Control: GT002 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR02 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.12(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00002
Process: GT6 Source Classification Code: 2-02-002-03
Process Description:
Process GT6 is the firing of natural gas in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT002) with no supplemental firing of the duct burner (Emission Source DB002) in Emission Unit U-00002. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The combustion turbine unit vents through a stack, identified as Emission Point E0002, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR02) as an emission control.

Emission Source/Control: GT002 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR02 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.13(From Mod 1):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00002
Process: GT8 Source Classification Code: 2-02-001-03
Process Description:
Process GT8 is the firing of low sulfur distillate oil in one GE LM 6000 PC SPRINT combustion turbine/HRSG unit (Emission Source GT002) with no supplemental firing of the duct burner (Emission Source DB002) in Emission Unit U-00002. The combustion turbine firing natural gas as the primary fuel and low sulfur distillate oil as the secondary fuel. The combustion turbine unit vents through a stack, identified as Emission Point E0002, that is located in the COGENB area. This emission unit is equipped with a selective catalytic reduction - SCR (Emission Control SCR02) as an emission control.

Low sulfur distillate oil firing is limited to 4.8 million gallons per year per combustion turbine (Emission Source GT002).

Emission Source/Control: GT002 - Combustion
Design Capacity: 469 million Btu per hour

Emission Source/Control: SCR02 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

**Item 124.14(From Mod 0):**
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-OILRS
Process: BD2 Source Classification Code: 1-03-004-02
Process Description:
Process BD2 is when the six boilers are firing low sulfur distillate oil, where the boilers are subject to the requirements of 40 CFR 63 Subpart JJJJJJ.

Emission Source/Control: HWG01 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG02 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG03 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG04 - Combustion
Design Capacity: 75 million Btu per hour

Emission Source/Control: HWG05 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWG06 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWGC1 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC4 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC5 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC6 - Control
Control Type: OXYGEN TRIM SYSTEM

**Item 124.15(From Mod 0):**

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

Emission Unit: B-OILRS
Process: BG2 Source Classification Code: 1-03-006-02
Process Description:
Process BG2 is when the six boilers are firing natural gas, where the boilers are subject to the requirements of 40 CFR 63 Subpart JJJJJJ.

Emission Source/Control: HWG01 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG02 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG03 - Combustion
Design Capacity: 40 million Btu per hour

Emission Source/Control: HWG04 - Combustion
Design Capacity: 75 million Btu per hour

Emission Source/Control: HWG05 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWG06 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: HWGC1 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC4 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC5 - Control
Control Type: OXYGEN TRIM SYSTEM

Emission Source/Control: HWGC6 - Control
Control Type: OXYGEN TRIM SYSTEM

**Condition 125: Emission Unit Permissible Emissions**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable Federal Requirement:**

**Expired by Mod 1**
**Applicaton Specific Data**

**Condition 1-23: Compliance Certification**
**Effective for entire length of Permit**

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

**Item 1-23.1:**

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

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG07

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG08

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG09

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG10

Emission Unit: B-OILRS
Process: BD4 Emission Source: HWG11

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG07

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG08

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG09

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG10

Emission Unit: B-OILRS
Process: BG3 Emission Source: HWG11

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-23.2:**
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
This condition applies to distillate oil/gas firing mid-size boilers. The owner or operator shall submit a testing protocol to the Department for approval a minimum of 90 days prior to any stack testing.

The owner or operator will maintain records on-site for a minimum of five years.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.08 pounds per million Btus
Reference Test Method: 40 CFR 60 Appendix A - Method 7, 7E, or 19

Monitoring Frequency: Once every five years
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

**Condition 1-24: Performance testing timeline.**
**Effective for entire length of Permit**

**Applicable Federal Requirement:40CFR 60.8(a), NSPS Subpart A**

**Item 1-24.1:**
This Condition applies to Emission Unit: B-OILRS

**Item 1-24.2:**
Within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup of the facility, the owner or operator of the facility shall conduct performance testing and provide the results of such tests, in a written report, to the Administrator.

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

### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
**This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability**

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

An emergency, as defined in 6 NYCRR subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) an emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) the equipment at the facility was being properly operated and maintained;
(3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the levels of emissions that exceeded the emission standards, or other requirements in the permit; and
(4) the facility owner or operator notified the department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

Item B: **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 133: Contaminant List**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable State Requirement:ECL 19-0301**

**Item 133.1:**
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: 007664-41-7
Name: AMMONIA

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

CAS No: 0NY100-00-0
Name: TOTAL HAP

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

**Condition 138: Compliance Demonstration**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable State Requirement:**

**Expired by Mod 1**

**Item 138.1:**
The Compliance Demonstration activity will be performed for the Facility.

**Item 138.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

(a) The emissions from any air contamination source project subject to this Subpart must meet the lowest achievable emission rate as defined in Part 200 of this Title.

(b) Any source owner subject to this Subpart must submit information to establish that the lowest achievable emission rate will be applied when an application is submitted for a permit to construct.

Reference Test Method: KEEP RECORDS
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 139: Compliance Demonstration**
**Effective between the dates of 06/28/2022 and Permit Expiration Date**

**Applicable State Requirement:**

**Expired by Mod 1**

**Item 139.1:**
The Compliance Demonstration activity will be performed for the Facility.

**Item 139.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

(a) An application for a permit to construct for an air contamination source project applicable to this Subpart must include an air quality impact evaluation.

(b) If the air contamination source project includes proposed emissions of particulates, sulfur dioxide, carbon monoxide and/or nitrogen oxides which exceed the DE MINIMIS emission limits shown in section 231-1.9 of this Subpart, the air quality impact evaluation must show that the combined impact of the proposed new emissions and the

emission offsets will not exceed the significant impacts shown in section 231-1.10 of this Subpart.

(c) The applicant for a permit to construct an air contamination source project applicable to this Subpart must conduct the air quality impact evaluation, and prepare a report in accordance with procedures acceptable to the commissioner.

Reference Test Method: Keep Records of Fuel
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION