



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6003-00038/00008
Mod 0 Effective Date: 02/26/2008 Expiration Date: 02/25/2013
Mod 1 Effective Date: 12/22/2011 Expiration Date: 02/25/2013

Permit Issued To: RIVERBAY CORP
2049 BARTOW AVE
BRONX, NY 10475-4613

Contact: BRIAN REARDON
RIVERBAY CORPORATION CO-OP CITY POWER PLANT
98 CO-OP CITY BLVD
BRONX, NY 10475-4613
(718) 320-3576

Facility: RIVERBAY CORP-CO-OP CITY
2049 BARTOW AVE
BRONX, NY 10475

Contact: BRIAN REARDON
RIVERBAY CORPORATION CO-OP CITY POWER PLANT
98 CO-OP CITY BLVD
BRONX, NY 10475-4613
(718) 320-3576

Description:

Permit Description
RIVERBAY CORP-CO-OP CITY
DEC ID # 2-6003-00038/00008 (Ren 1, Mod 1)

The Title V Air permit conditions for emission units U-00004 and U-00006 are being modified to adjust the permit limits of the sulfur containing contaminants (SO₂, H₂SO₄, etc.), when firing natural gas and ultra low sulfur diesel fuel oil in the two combustion gas turbine emission sources. The modification changes the gaseous fuel fired in the combustion gas turbines (U-00004 and U-00006) from "pipeline gas" to "natural gas". Pipeline gas is defined in federal regulation with maximum sulfur content of 0.5 grains per 100 scf gas. Natural gas is defined in federal regulation with maximum sulfur content of 20 grains per 100 scf gas.

New York State Department of Environmental Conservation
Facility DEC ID: 2600300038



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: JOHN F CRYAN
 NYSDEC
 47-40 21ST ST
 LONG ISLAND CITY, NY 11101-5407

Authorized Signature: _____ Date: ____ / ____ / ____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
 - Applications for permit renewals, modifications and transfers
 - Applications for Permit Renewals and Modifications
 - Permit modifications, suspensions or revocations by the Department
 - Permit modifications, suspensions or revocations by the Department
 - Permit Modifications, Suspensions and Revocations by the Department

Facility Level

- Submission of Applications for Permit Modification or Renewal-REGION 2 HEADQUARTERS
- Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS



DEC GENERAL CONDITIONS

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

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

GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 1.1:

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

Item 1.2:

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

Item 1.3:

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

Condition 2: Relationship of this Permit to Other Department Orders and Determinations

Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:

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

Condition 3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

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

Item 3.2:

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

Item 3.3:

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



Condition 4: Applications for Permit Renewals and Modifications

Applicable State Requirement: 6 NYCRR 621.13

Expired by Mod No: 1

Item 4.1:

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

Item 4.2:

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

Item 4.3:

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 5: Permit modifications, suspensions or revocations by the Department

Applicable State Requirement: 6 NYCRR 621.13

Expired by Mod No: 1

Item 5.1:

The Department reserves the right 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.

Condition 1-1: Permit modifications, suspensions or revocations by the Department

Applicable State Requirement: 6 NYCRR 621.13

Item 1-1.1:

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;



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.

Condition 6: Permit Modifications, Suspensions and Revocations by the Department
Applicable State Requirement: 6 NYCRR 621.14

Item 6.1:

The Department reserves the right 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 7: Submission of Applications for Permit Modification or Renewal-REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.5 (a)

Expired by Mod No: 1

Item 7.1:

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

Condition 8: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 8.1:

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 Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: RIVERBAY CORP
2049 BARTOW AVE
BRONX, NY 10475-4613

Facility: RIVERBAY CORP-CO-OP CITY
2049 BARTOW AVE
BRONX, NY 10475

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

Mod 0 Permit Effective Date: 02/26/2008

Permit Expiration Date: 02/25/2013

Mod 1 Permit Effective Date: 12/22/2011

Permit Expiration Date: 02/25/2013



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 1-1 6 NYCRR 201-6.5 (a) (7): Fees
- 3 6 NYCRR 201-6.5 (c): Recordkeeping and reporting of compliance monitoring
- 4 6 NYCRR 201-6.5 (c) (2): Monitoring, Related Recordkeeping, and Reporting Requirements.
- 5 6 NYCRR 201-6.5 (c) (3) (ii): Compliance Certification
- 6 6 NYCRR 201-6.5 (e): Compliance Certification
- 7 6 NYCRR 202-2.1: Compliance Certification
- 8 6 NYCRR 202-2.5: Recordkeeping requirements
- 9 6 NYCRR Part 215: Open Fires Prohibited at Industrial and Commercial Sites
- 1-2 6 NYCRR 215.2: Open Fires - Prohibitions
- 10 6 NYCRR 200.7: Maintenance of Equipment
- 11 6 NYCRR 201-1.7: Recycling and Salvage
- 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 15 6 NYCRR 201-6.5 (a) (4): Standard Requirement - Provide Information
- 16 6 NYCRR 201-6.5 (a) (8): General Condition - Right to Inspect
- 17 6 NYCRR 201-6.5 (d) (5): Standard Requirements - Progress Reports
- 18 6 NYCRR 201-6.5 (f) (6): Off Permit Changes
- 1-3 6 NYCRR 202-1.1: Required Emissions Tests
- 19 6 NYCRR 202-1.1: Required Emissions Tests
- 20 6 NYCRR 211.3: Visible Emissions Limited
- 21 40 CFR Part 68: Accidental release provisions.
- 22 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 23 6 NYCRR Subpart 201-6: Emission Unit Definition
- 24 6 NYCRR 201-6.5 (c) (3): Compliance Certification
- 25 6 NYCRR 201-6.5 (g): Non Applicable requirements
- *26 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *27 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *28 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *29 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *30 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *31 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *32 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *33 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *34 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *35 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 36 6 NYCRR 202-1.2: Compliance Certification
- 37 6 NYCRR 202-1.3: Compliance Certification
- 38 6 NYCRR Subpart 202-2: Compliance Certification
- 39 6 NYCRR Subpart 204-1: Compliance Certification
- 40 6 NYCRR 204-4.1: Contents of reports and compliance certifications.



- 41 6 NYCRR 204-8.1: Requirements for installation, certification, and data accounting.
- 1-4 6 NYCRR 211.1: Air pollution prohibited
- 42 6 NYCRR 225-1.2 (a) (2): Compliance Certification
- 43 6 NYCRR 227-1.3: Compliance Certification
- 44 6 NYCRR 227-2.4 (a): Compliance Certification
- 45 6 NYCRR 227-2.4 (a): Compliance Certification
- 46 6 NYCRR 227-2.6 (b) (3) (i): Compliance Certification
- 47 40CFR 72.9, Subpart A: Compliance Certification
- 48 40CFR 75.11(d), Subpart B: Compliance Certification
- 49 40CFR 75.20, Subpart C: Compliance Certification

Emission Unit Level

- 50 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 51 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 52 6 NYCRR Subpart 201-7: Process Permissible Emissions

EU=U-00001,EP=00001

- 53 6 NYCRR 227-1.3 (a): Compliance Certification
- 54 6 NYCRR 227-1.4 (b): Compliance Certification
- 55 6 NYCRR 227-2.4 (a): Compliance Certification
- 56 6 NYCRR 227-2.4 (a): Compliance Certification
- 57 6 NYCRR 227-2.6 (a) (1): Compliance Certification
- 58 6 NYCRR 227-2.6 (b) (3): Compliance Certification

EU=U-00001,EP=00001,Proc=001,ES=00001

- 59 6 NYCRR 225-1.2 (a): Compliance Certification
- 60 6 NYCRR 227-1.2 (a) (1): Compliance Certification
- 61 6 NYCRR Subpart 227-2: Compliance Certification

EU=U-00001,EP=00001,Proc=002,ES=00001

- 62 6 NYCRR Subpart 227-2: Compliance Certification

EU=U-00002,EP=00002

- 63 6 NYCRR 227-1.3 (a): Compliance Certification
- 64 6 NYCRR 227-1.4 (b): Compliance Certification
- 65 6 NYCRR 227-2.4 (a): Compliance Certification
- 66 6 NYCRR 227-2.4 (a): Compliance Certification
- 67 6 NYCRR 227-2.6 (a) (1): Compliance Certification
- 68 6 NYCRR 227-2.6 (b) (3): Compliance Certification

EU=U-00002,EP=00002,Proc=003,ES=00002

- 69 6 NYCRR 225-1.2 (a): Compliance Certification
- 70 6 NYCRR 227-1.2 (a) (1): Compliance Certification
- 71 6 NYCRR Subpart 227-2: Compliance Certification

EU=U-00002,EP=00002,Proc=004,ES=00002

- 72 6 NYCRR Subpart 227-2: Compliance Certification

EU=U-00003,EP=00003



73 6 NYCRR 227-1.3 (a): Compliance Certification

EU=U-00003,EP=00003,Proc=005,ES=HPB03

- *74 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *75 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 76 6 NYCRR 227-2.4 (b): Compliance Certification
- 77 6 NYCRR 227-2.4 (b) (1): Compliance Certification
- 78 6 NYCRR 227-2.6 (a) (3): Compliance Certification
- 79 6 NYCRR 227-2.6 (b): Compliance Certification
- 80 6 NYCRR 227-2.6 (c): Compliance Certification
- 81 6 NYCRR 227.2 (b) (1): Compliance Certification
- 82 40CFR 60.8, NSPS Subpart A: Compliance Certification
- 83 40CFR 60.42b(j), NSPS Subpart Db: Compliance Certification
- 84 40CFR 60.43b(b), NSPS Subpart Db: Compliance Certification
- 85 40CFR 60.43b(f), NSPS Subpart Db: Compliance Certification
- 86 40CFR 60.44b(a)(1), NSPS Subpart Db: Compliance Certification
- 87 40CFR 60.44b(a)(1), NSPS Subpart Db: Compliance Certification
- 88 40CFR 60.45b(j), NSPS Subpart Db: Compliance Certification
- 89 40CFR 60.46b(e), NSPS Subpart Db: Compliance Certification
- 90 40CFR 60.47b(f), NSPS Subpart Db: Compliance Certification
- 91 40CFR 60.48b(b), NSPS Subpart Db: Compliance Certification
- 92 40CFR 60.49b(a), NSPS Subpart Db: Compliance Certification

EU=U-00003,EP=00003,Proc=006,ES=HPB03

- *93 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 94 6 NYCRR 227-2.4 (b): Compliance Certification
- 95 6 NYCRR 227-2.4 (b) (1): Compliance Certification
- 96 6 NYCRR 227-2.6 (a) (3): Compliance Certification
- 97 6 NYCRR 227-2.6 (b): Compliance Certification
- 98 6 NYCRR 227-2.6 (c): Compliance Certification
- 99 40CFR 60.8, NSPS Subpart A: Compliance Certification
- 100 40CFR 60.43b(f), NSPS Subpart Db: Compliance Certification
- 101 40CFR 60.46b(e), NSPS Subpart Db: Compliance Certification
- 102 40CFR 60.48b(b), NSPS Subpart Db: Compliance Certification
- 103 40CFR 60.49b, NSPS Subpart Db: Compliance Certification

EU=U-00004,EP=00004

- 104 6 NYCRR 211.3: Compliance Certification
- 105 6 NYCRR 225-1.7: Compliance Certification
- 106 6 NYCRR 227-1.3 (a): Compliance Certification
- 107 6 NYCRR 227-1.3 (a): Compliance Certification
- 108 6 NYCRR 227-1.3 (b): Compliance Certification
- 109 6 NYCRR 227-1.3 (b): Compliance Certification
- 110 6 NYCRR 227-2.6 (b): Compliance Certification
- 111 6 NYCRR 227-2.6 (b): Compliance Certification
- 112 6 NYCRR 231-2.7 (b): Compliance Certification
- 113 6 NYCRR 231-2.7 (b): Compliance Certification
- 114 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-5 40CFR 52.21(j), Subpart A: Compliance Certification
- 116 40CFR 52.21(j), Subpart A: Compliance Certification
- 117 40CFR 52.21(j), Subpart A: Compliance Certification



- 118 40CFR 52.21(j), Subpart A: Compliance Certification
- 119 40CFR 60.334(b), NSPS Subpart GG: Compliance Certification
- 120 40CFR 60.334(c), NSPS Subpart GG: Compliance Certification
- 121 40CFR 60.334(c)(1), NSPS Subpart GG: Compliance Certification
- 122 40CFR 60.334(c)(1), NSPS Subpart GG: Compliance Certification
- 123 40CFR 60.334(c)(1), NSPS Subpart GG: Compliance Certification
- 1-6 40CFR 60.334(h)(3), NSPS Subpart GG: Compliance Certification
- 125 40CFR 60.334(i)(1), NSPS Subpart GG: Compliance Certification

EU=U-00004,EP=00004,Proc=007,ES=GT004

- 126 6 NYCRR 227-2.4 (e) (2) (ii): Compliance Certification
- 127 6 NYCRR 231-2.7 (b): Compliance Certification
- 128 6 NYCRR 231-2.7 (b): Compliance Certification
- 129 6 NYCRR 231-2.7 (b): Compliance Certification
- 130 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-7 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-8 40CFR 52.21(j), Subpart A: Compliance Certification
- 133 40CFR 52.21(j), Subpart A: Compliance Certification
- 134 40CFR 52.21(j), Subpart A: Compliance Certification
- 135 40CFR 52.21(j), Subpart A: Compliance Certification
- 136 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00004,EP=00004,Proc=008,ES=GT004

- 137 6 NYCRR 227-2.4 (e) (2) (ii): Compliance Certification
- 138 6 NYCRR 231-2.7 (b): Compliance Certification
- 139 6 NYCRR 231-2.7 (b): Compliance Certification
- 140 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-9 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-10 40CFR 52.21(j), Subpart A: Compliance Certification
- 141 40CFR 52.21(j), Subpart A: Compliance Certification
- 144 40CFR 52.21(j), Subpart A: Compliance Certification
- 145 40CFR 52.21(j), Subpart A: Compliance Certification
- 146 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00004,EP=00004,Proc=009,ES=GT004

- 147 6 NYCRR 227-2.4 (e) (2) (i): Compliance Certification
- 148 6 NYCRR 227-2.6 (b): Compliance Certification
- 149 6 NYCRR 231-2.7 (b): Compliance Certification
- 150 6 NYCRR 231-2.7 (b): Compliance Certification
- 151 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-11 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-12 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-13 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-14 40CFR 52.21(j), Subpart A: Compliance Certification
- 154 40CFR 52.21(j), Subpart A: Compliance Certification
- 155 40CFR 52.21(j), Subpart A: Compliance Certification
- 156 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00004,EP=00004,Proc=011,ES=GTC04

- 158 6 NYCRR 227-2.4 (c) (1): Compliance Certification
- 159 6 NYCRR 227-2.6 (b): Compliance Certification
- 1-15 40CFR 52.21(j), Subpart A: Compliance Certification



- 1-16 40CFR 52.21(j), Subpart A: Compliance Certification
- 160 40CFR 52.21(j), Subpart A: Compliance Certification
- 161 40CFR 52.21(j), Subpart A: Compliance Certification
- 162 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-17 40CFR 60.43c(e), NSPS Subpart Dc: Compliance Certification
- 1-18 40CFR 60.47c(c), NSPS Subpart Dc: Compliance Certification
- 1-19 40CFR 60.48c, NSPS Subpart Dc: Compliance Certification

EU=U-00004,EP=00004,Proc=P10,ES=GT004

- 165 6 NYCRR 227-2.4 (e) (2) (i): Compliance Certification
- 166 6 NYCRR 227-2.6 (b): Compliance Certification
- 167 6 NYCRR 231-2.7 (b): Compliance Certification
- 168 6 NYCRR 231-2.7 (b): Compliance Certification
- 169 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-20 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-21 40CFR 52.21(j), Subpart A: Compliance Certification
- 172 40CFR 52.21(j), Subpart A: Compliance Certification
- 173 40CFR 52.21(j), Subpart A: Compliance Certification
- 174 40CFR 52.21(j), Subpart A: Compliance Certification
- 175 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00006,EP=00006

- 176 6 NYCRR 211.3: Compliance Certification
- 177 6 NYCRR 225-1.7: Compliance Certification
- 178 6 NYCRR 227-1.3 (a): Compliance Certification
- 179 6 NYCRR 227-1.3 (a): Compliance Certification
- 180 6 NYCRR 227-1.3 (b): Compliance Certification
- 181 6 NYCRR 227-1.3 (b): Compliance Certification
- 182 6 NYCRR 227-2.6 (b): Compliance Certification
- 183 6 NYCRR 227-2.6 (b): Compliance Certification
- 184 6 NYCRR 231-2.7 (b): Compliance Certification
- 185 6 NYCRR 231-2.7 (b): Compliance Certification
- 186 6 NYCRR 231-2.7 (b): Compliance Certification
- 187 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-22 40CFR 52.21(j), Subpart A: Compliance Certification
- 189 40CFR 52.21(j), Subpart A: Compliance Certification
- 190 40CFR 52.21(j), Subpart A: Compliance Certification
- 191 40CFR 60.334(b), NSPS Subpart GG: Compliance Certification
- 192 40CFR 60.334(c), NSPS Subpart GG: Compliance Certification
- 193 40CFR 60.334(c)(1), NSPS Subpart GG: Compliance Certification
- 194 40CFR 60.334(c)(1), NSPS Subpart GG: Compliance Certification
- 195 40CFR 60.334(c)(1), NSPS Subpart GG: Compliance Certification
- 1-23 40CFR 60.334(h)(3), NSPS Subpart GG: Compliance Certification
- 197 40CFR 60.334(i)(1), NSPS Subpart GG: Compliance Certification

EU=U-00006,EP=00006,Proc=012,ES=GT006

- 198 6 NYCRR 227-2.4 (e) (2) (ii): Compliance Certification
- 199 6 NYCRR 231-2.7 (b): Compliance Certification
- 200 6 NYCRR 231-2.7 (b): Compliance Certification
- 201 6 NYCRR 231-2.7 (b): Compliance Certification
- 1-24 40CFR 52.21(j), Subpart A: Compliance Certification



1-25 40CFR 52.21(j), Subpart A: Compliance Certification
203 40CFR 52.21(j), Subpart A: Compliance Certification
205 40CFR 52.21(j), Subpart A: Compliance Certification
206 40CFR 52.21(j), Subpart A: Compliance Certification
207 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00006,EP=00006,Proc=013,ES=GT006

208 6 NYCRR 227-2.4 (e) (2) (ii): Compliance Certification
209 6 NYCRR 231-2.7 (b): Compliance Certification
210 6 NYCRR 231-2.7 (b): Compliance Certification
211 6 NYCRR 231-2.7 (b): Compliance Certification
212 6 NYCRR 231-2.7 (b): Compliance Certification
213 6 NYCRR 231-2.7 (b): Compliance Certification
1-26 40CFR 52.21(j), Subpart A: Compliance Certification
1-27 40CFR 52.21(j), Subpart A: Compliance Certification
214 40CFR 52.21(j), Subpart A: Compliance Certification
217 40CFR 52.21(j), Subpart A: Compliance Certification
218 40CFR 52.21(j), Subpart A: Compliance Certification
219 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00006,EP=00006,Proc=014,ES=GT006

220 6 NYCRR 227-2.4 (e) (2) (i): Compliance Certification
221 6 NYCRR 227-2.6 (b): Compliance Certification
222 6 NYCRR 231-2.7 (b): Compliance Certification
223 6 NYCRR 231-2.7 (b): Compliance Certification
224 6 NYCRR 231-2.7 (b): Compliance Certification
1-28 40CFR 52.21(j), Subpart A: Compliance Certification
1-29 40CFR 52.21(j), Subpart A: Compliance Certification
1-30 40CFR 52.21(j), Subpart A: Compliance Certification
228 40CFR 52.21(j), Subpart A: Compliance Certification
229 40CFR 52.21(j), Subpart A: Compliance Certification
230 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00006,EP=00006,Proc=015,ES=GT006

231 6 NYCRR 227-2.4 (e) (2) (i): Compliance Certification
232 6 NYCRR 227-2.6 (b): Compliance Certification
233 6 NYCRR 231-2.7 (b): Compliance Certification
234 6 NYCRR 231-2.7 (b): Compliance Certification
235 6 NYCRR 231-2.7 (b): Compliance Certification
1-31 40CFR 52.21(j), Subpart A: Compliance Certification
1-32 40CFR 52.21(j), Subpart A: Compliance Certification
239 40CFR 52.21(j), Subpart A: Compliance Certification
240 40CFR 52.21(j), Subpart A: Compliance Certification
241 40CFR 52.21(j), Subpart A: Compliance Certification

EU=U-00006,EP=00006,Proc=016,ES=GTC06

242 6 NYCRR 227-2.4 (c) (1): Compliance Certification
243 6 NYCRR 227-2.6 (b): Compliance Certification
1-33 40CFR 52.21(j), Subpart A: Compliance Certification
1-34 40CFR 52.21(j), Subpart A: Compliance Certification
244 40CFR 52.21(j), Subpart A: Compliance Certification
245 40CFR 52.21(j), Subpart A: Compliance Certification



- 246 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-35 40CFR 60.43c(e), NSPS Subpart Dc: Compliance Certification
- 1-36 40CFR 60.47c(c), NSPS Subpart Dc: Compliance Certification
- 1-37 40CFR 60.48c, NSPS Subpart Dc: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 249 ECL 19-0301: Contaminant List
- 1-38 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 1-39 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

EU=U-00004,EP=00004

- 252 6 NYCRR 227-1.2 (a) (2): Compliance Demonstration
- 253 6 NYCRR 227-1.2 (a) (2): Compliance Demonstration

EU=U-00006,EP=00006

- 254 6 NYCRR 227-1.2 (a) (2): Compliance Demonstration
- 255 6 NYCRR 227-1.2 (a) (2): Compliance Demonstration

NOTE: * preceding the condition number indicates capping.



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

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

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for 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 C: Timely Application for the Renewal of Title V Permits - 6 NYCRR 201-6.3 (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 D: Certification by a Responsible Official - 6 NYCRR 201-6.3 (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 E: Requirement to Comply With All Conditions - 6 NYCRR 201-6.5 (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 F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR 201-6.5 (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 G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.5 (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 H: Property Rights - 6 NYCRR 201-6.5 (a) (6)

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



Item I: Severability - 6 NYCRR 201-6.5 (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 J: Permit Shield - 6 NYCRR 201-6.5 (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 K: Reopening for Cause - 6 NYCRR 201-6.5 (i)

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is



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

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

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

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

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

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

Item L: 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 M: **Federally Enforceable Requirements - 40 CFR 70.6 (b)**
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

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

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

Condition 1: Acceptable Ambient Air Quality
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 200.6

Item 1.1:
Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Condition 1-1: Fees
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (7)

Item 1-1.1:
The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

Condition 3: Recordkeeping and reporting of compliance monitoring
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (c)

Item 3.1:



The following information must be included in any required compliance monitoring records and reports:

- (i) The date, place, and time of sampling or measurements;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.3 of this Part 201.

Condition 4: Monitoring, Related Recordkeeping, and Reporting Requirements.

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (2)

Item 4.1:

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

Condition 5: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Submit reports of any required monitoring at a minimum



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

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

(1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.

(2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.

(3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.

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

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A



written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.3(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

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

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

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.5(e), contained elsewhere in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.



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

Condition 6: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (e)

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

- i. Compliance certifications shall contain:
 - the identification of each term or condition of the permit that is the basis of the certification;
 - the compliance status;
 - whether compliance was continuous or intermittent;
 - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
 - such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
 - such additional requirements as may be specified elsewhere in this permit related to compliance certification.
- ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.
- iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



iv. All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

The address for the BQA is as follows:

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

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:

The Compliance Certification activity will be performed for the Facility.

Item 7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Resources, Bureau of Air Quality Planning, 625 Broadway,
Albany NY 12233-3251

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

Condition 8: Recordkeeping requirements
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 8.1:

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

- (1) a copy of each emission statement submitted to the department; and
- (2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

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

Condition 9: Open Fires Prohibited at Industrial and Commercial Sites
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Part 215

Item 9.1:

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, refuse, rubbish for salvage, or rubbish generated by industrial or commercial activities.

Condition 1-2: Open Fires - Prohibitions
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 215.2

Item 1-2.1:

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

Item 1-2.2

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

- (a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.



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

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

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

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

**Condition 10: Maintenance of Equipment
Effective between the dates of 02/26/2008 and 02/25/2013**

Applicable Federal Requirement: 6 NYCRR 200.7

Item 10.1:

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



effectively.

Condition 11: Recycling and Salvage
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 11.1:

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

Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

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

Condition 13: Exempt Sources - Proof of Eligibility
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 13.1:

The owner and/or operator of an emission source or unit that is eligible to be exempt may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 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.

Condition 14: Trivial Sources - Proof of Eligibility
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-3.3 (a)

Item 14.1:

The owner and/or operator of an emission source or unit that is listed as being trivial in this Part may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 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.



Condition 15: Standard Requirement - Provide Information
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (4)

Item 15.1:

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 16: General Condition - Right to Inspect
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (8)

Item 16.1:

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

- (i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and
- (iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 17: Standard Requirements - Progress Reports
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (d) (5)

Item 17.1:

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

- (i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- (ii) an explanation of why any dates in the schedule of compliance were not or will not be met,



and any preventive or corrective measures adopted.

Condition 18: Off Permit Changes
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (f) (6)

Item 18.1:

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

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

(ii) The permit shield described in section 6 NYCRR 201-6.6 shall not apply to any change made pursuant to this paragraph.

Condition 1-3: Required Emissions Tests
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 1-3.1:

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

Condition 19: Required Emissions Tests
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 19.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time. Such person shall bear the cost of measurement and preparing the report of measured emissions. Failure of such person to submit a report acceptable to the commissioner within the time stated shall be sufficient reason for the commissioner to suspend or deny a certificate to operate.

Condition 20: Visible Emissions Limited



Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 211.3

Item 20.1:

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

Condition 21: Accidental release provisions.

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40 CFR Part 68

Item 21.1:

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

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
- b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:
 - 1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,
 - 2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

Condition 22: Recycling and Emissions Reduction

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 82, Subpart F

Item 22.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

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



Condition 23: Emission Unit Definition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 23.1(From Mod 1):

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

Emission Unit: U-00004

Emission Unit Description:

Emission Unit U-00004 is comprised of a Combustion Gas Turbine (Siemens Model GT-400), rated at 131 MM Btu/hr (Emission Source GT004) firing natural gas (Processes 009 & P10) or ultra low 15 ppm sulfur by weight distillate fuel oil (Processes 007 & 008). The CTG is rated to produce 12 MW of electrical power. The CTG exhausts gas is further heated by a natural gas fired (Process 011) duct burner (Emission Control GTC04), rated at 60.7 MM Btu/hr. The duct burner design operating rates are 46 MM Btu/hr at maximum inlet temperature of 55 degrees Fahrenheit, and 53.3 MM Btu/hr at minimum inlet temperature of minus 5 degrees Fahrenheit duct burner. The exhaust gas then passes through an oxidation catalyst to destroy carbon monoxide (CO) and Volatile Organic Compounds (VOC) and then through a Selective Catalytic Oxidation (SCR) system to destroy nitrogen oxides (NOx). The gas then vents out of a stack (Emission Point 00004) mounted on top of a once through steam generator (OTSG). To improve turbine performance, the inlet air is cooled to a maximum of 55 degrees Fahrenheit. The gas turbine is limited to operating a maximum of 2,160 hours/year on distillate fuel oil. In addition, the gas turbine may not operate at low load for more than 50 % of the operating hours.

Building(s): PPLANT

Item 23.2(From Mod 1):

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

Emission Unit: U-00006

Emission Unit Description:

Emission Unit U-00006 is comprised of a Combustion Gas Turbine (Siemens Model GT-400), rated at 131 MM Btu/hr (Emission Source GT006) firing natural gas (Processes 14 & 15) or ultra low 15 ppm sulfur by weight distillate oil (Processes 012 & 013). The CTG is rated to produce 12 MW of electrical power. The CTG exhausts gas is further heated by a natural gas fired (Process 016) duct burner (Emission Control GTC06), rated at 60.7 MM Btu/hr. The duct burner design operating rates are 46 MM Btu/hr at maximum inlet temperature of 55 degrees Fahrenheit, and 53.3 MM Btu/hr at minimum inlet temperature of minus 5 degrees Fahrenheit duct burner. The exhaust gas then passes through an oxidation catalyst to destroy carbon



monoxide (CO) and Volatile Organic Compounds (VOC) and then through a Selective Catalytic Oxidation (SCR) system to destroy nitrogen oxides (NO_x). The gas then vents out of a stack (Emission Point 00006) mounted on top of a once through steam generator (OTSG). To improve turbine performance, the inlet air is cooled to a maximum of 55 degrees Fahrenheit. The gas turbine is limited to operating a maximum of 2,160 hours/year on distillate fuel oil. In addition, the gas turbine may not operate at low load for more than 50 % of the operating hours.

Building(s): PPLANT

Item 23.3(From Mod 0):

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

Emission Unit: U-00001

Emission Unit Description:

Emission Unit U-00001 is comprised of a 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001) that was constructed July 1968. The emissions exhaust through a stack, identified as Emission Point 00001. This low pressure boiler is capable of firing either natural gas (Process 002) or # 6 fuel oil (Process 001). The conversion to operating w/dual fuel burners commenced in May 1995.

Building(s): PPLANT

Item 23.4(From Mod 0):

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

Emission Unit: U-00002

Emission Unit Description:

Emission Unit U-00002 is comprised of a 371 MM Btu/hr low pressure Riley Stoker Model OD-1 boiler (Emission Source 00002) that was constructed July 1968. The emissions exhaust through a stack, identified as Emission Point 00002. This low pressure boiler is capable of firing either natural gas (Process 004) or # 6 fuel oil (Process 003). The conversion to operating w/dual fuel burners commenced in May 1995.

Building(s): PPLANT

Item 23.5(From Mod 0):

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

Emission Unit: U-00003

Emission Unit Description:

Emission Unit U-00003 is comprised of one state-of-the art new high pressure and low heat release boiler (Rentech Model D Watertube), rated at 212 MM BTU/hr (Emission Source S0003), firing ultra low 15 ppm sulfur by weight distillate oil (Process 005) or natural gas (Process 006),



venting to existing stack (Emission Point 00003) for Emission Source ES004 in Emission Unit U-00005. The new boiler will be equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control C0003). Potential emissions of all criteria air pollutants will be significantly lower for the new boiler.

This is a replacement for the existing high pressure boiler (Emission Source ES004 in Emission Unit U-00003), which is a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and is being de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, is not operational and will be de-commissioned since repair costs are excessive. The existing boiler is rated at 377 MM BTU/hr and is permitted to burn #6 fuel oil or natural gas.

Building(s): PPLANT

Condition 24: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (c) (3)

Item 24.1:

The Compliance Certification activity will be performed for the Facility.

Item 24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Semi-annual Compliance Certification - Submit Semi-annual monitoring report for Title V permit conditions to USEPA and NYSDEC.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 25: Non Applicable requirements
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (g)

Item 25.1:

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

Emission Unit: U00001

Reason: The existing boilers are not subject to NSR regulations 6 NYCRR 231. To obtain internal emission offsets for NO_x and VOC, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 6 fuel oil and natural gas which can be used in the boilers.

The total amount of # 6 fuel oil consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1.3 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1,040 MM CF/year, reduced by 370 cubic feet per gallon of oil burned.

6 NYCRR Subpart 231-2

Emission Unit: U00003

Reason: Since this facility is located in a severe ozone non-attainment area and ozone transport region, the only non-attainment contaminants to be reviewed for Part 231 are NO_x and VOC. The new high pressure & low release rate boiler to be installed is a replacement of an emission source with similar equipment using the same emission stack, with lower input heat rating 212 MM BTU/hr vs. 377 MM BTU/hr), and a decrease in the Maximum Annual Potential (MAP) emissions of all pollutants compared to the existing boiler. Therefore, the projected actual annual emissions of the new boiler are less than the baseline actual emissions of the existing boiler and, therefore, the new emission source is not subject to Part 231 New Source Review for either NO_x or VOC in accordance with 6 NYCRR 231-2.2(d)(6) exemptions and 6 NYCRR 231-2.1(b)(40) definitions of a source project.

The replacement HP boiler is not subject to NSR regulations 6 NYCRR 231-2. To obtain internal emission offsets for NO_x and VOC, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 2 fuel oil and natural gas which can be used in the boiler. The total amount of # 2 fuel oil consumption in Emission Unit U-00003 will not exceed 2.5 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00003 will not exceed 1,800 MM CF/year, reduced by 320 cubic feet per gallon of oil burned.

6 NYCRR Subpart 231-2

Emission Unit: U00006

Reason: The Total Potential Emissions increase from the installation of both combustion gas turbine units (U-00004 and U-00006) will not exceed the allowable increments for non-attainment pollutants NO_x and VOC as contained in 6 NYCRR 231-2.12 Table 2, including operating limitations on



the gas turbine operation and credit for internal offsets from operating limitations on boiler emission units U-00001, U-00002, and U-00003. Detailed calculations were submitted with the Title V renewal application in supplementary document SD-9.

6 NYCRR Subpart 231-2

Emission Unit: U00002

Reason: The existing boilers are not subject to NSR regulations 6 NYCRR 231. To obtain internal emission offsets for NOx and VOC, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 6 fuel oil and natural gas which can be used in the boilers.

The total amount of # 6 fuel oil consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1.3 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1,040 MM CF/year, reduced by 370 cubic feet per gallon of oil burned.

6 NYCRR Subpart 231-2

Emission Unit: U00004

Reason: The Total Potential Emissions increase from the installation of both combustion gas turbine units (U-00004 and U-00006) will not exceed the allowable increments for non-attainment pollutants NOx and VOC as contained in 6 NYCRR 231-2.12 Table 2, including operating limitations on the gas turbine operation and credit for internal offsets from operating limitations on boiler emission units U-00001, U-00002, and U-00003. Detailed calculations were submitted with the Title V renewal application in supplementary document SD-9.

40 CFR Part 52, Subpart A

Emission Unit: U00001

Reason: The existing boilers are not subject to PSD regulations 40 CFR 52. To obtain internal emission offsets for PM, PM-10, CO and SO2, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 6 fuel oil and natural gas which can be used in the boilers. The total amount of # 6 fuel oil consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1.3 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1,040 MM CF/year, reduced by 370 cubic feet per gallon of oil burned.

40 CFR Part 52, Subpart A

Emission Unit: U00006

Reason: The Total Potential Emissions increase from the



installation of both combustion gas turbine units (U-00004 and U-00006) will not exceed the allowable increments for non-attainment pollutants CO, PM, PM-10, SO₂ and all other listed PSD applicable pollutants as contained in 40 CFR 52, including operating limitations on the gas turbine operation and credit for internal offsets from operating limitations on boiler emission units U-00001, U-00002, and U-00003. Detailed calculations were submitted with the Title V renewal application in supplementary document SD-9.

40 CFR Part 52, Subpart A

Emission Unit: U00004

Reason: The Total Potential Emissions increase from the installation of both combustion gas turbine units (U-00004 and U-00006) will not exceed the allowable increments for non-attainment pollutants CO, PM, PM-10, SO₂ and all other listed PSD applicable pollutants as contained in 40 CFR 52, including operating limitations on the gas turbine operation and credit for internal offsets from operating limitations on boiler emission units U-00001, U-00002, and U-00003. Detailed calculations were submitted with the Title V renewal application in supplementary document SD-9.

40 CFR Part 52, Subpart A

Emission Unit: U00002

Reason: The existing boilers are not subject to PSD regulations 40 CFR 52. To obtain internal emission offsets for PM, PM-10, CO and SO₂, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 6 fuel oil and natural gas which can be used in the boilers. The total amount of # 6 fuel oil consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1.3 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00001 and Emission Unit U-00002 combined will not exceed 1,040 MM CF/year, reduced by 370 cubic feet per gallon of oil burned.

40 CFR 52.21

Emission Unit: U00003

Reason: The new high pressure & low release rate boiler to be installed is a replacement of an emission source with similar equipment using the same emission stack, with lower input heat rating 212 MM BTU/hr vs. 377 MM BTU/hr), and a decrease in the Maximum Annual Potential (MAP) emissions of all pollutants compared to the existing boiler. Therefore, the projected actual annual emissions of the new boiler are less than the baseline actual emissions of the existing boiler and, therefore, are not subject to PSD regulations in accordance with 40 CFR 52.21



(a)(2)(iv)(c).

The replacement HP boiler is not subject to PSD regulations 40 CFR 52. To obtain internal emission offsets for PM, PM-10, CO and SO₂, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 2 fuel oil and natural gas which can be used in the boiler. The total amount of # 2 fuel oil consumption in Emission Unit U-00003 will not exceed 2.5 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00003 will not exceed 1,800 MM CF/year, reduced by 320 cubic feet per gallon of oil burned.

40 CFR 60.42c

Emission Unit: U00006

Reason: The Duct Burners (Emission Sources GT006 & GTC06) are only natural gas fired and, as a result, are not subject to any regulation on Sulfur Dioxide emissions in 40 CFR 60 Subpart Dc, or testing, monitoring, and reporting requirements in 40 CFR 60.44c and 40 CFR 60.46c, or 40 CFR 60.48c.

40 CFR 60.42c

Emission Unit: U00004

Reason: The Duct Burners (Emission Sources GT004 & GTC04) are only natural gas fired and, as a result, are not subject to any regulation on Sulfur Dioxide emissions in 40 CFR 60 Subpart Dc, or testing, monitoring, and reporting requirements in 40 CFR 60.44c and 40 CFR 60.46c, or 40 CFR 60.48c.

40 CFR Part 63, Subpart YYYY

Emission Unit: U00006

Reason: The facility Potential Emissions of all combined Hazardous Air Pollutant (HAP) Emissions before and following the installation of both combustion gas turbine units (U-00004 and U-00006) will not exceed 25 Tons per year, and the Potential Emissions of any individual (speciated) HAP will not exceed 10 Tons/year. As a result, the facility is not a Major Source of HAPs emissions, and is not subject to 40 CFR 63, Subpart YYYY for gas turbines.

40 CFR Part 63, Subpart YYYY

Emission Unit: U00004

Reason: The facility Potential Emissions of all combined Hazardous Air Pollutant (HAP) Emissions before and following the installation of both combustion gas turbine units (U-00004 and U-00006) will not exceed 25 Tons per year, and the Potential Emissions of any individual (speciated) HAP will not exceed 10 Tons/year. As a result, the facility is not a Major Source of HAPs emissions, and is not subject to 40



CFR 63, Subpart YYYYY for gas turbines.

Condition 26: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 26.1:

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 231-2.7 (b)

Item 26.2:

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

Item 26.3:

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 26.4:

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 26.5:

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 26.6:

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

Emission Unit: U-00004
Process: 008

Emission Point: 00004
Emission Source: GT004

Emission Unit: U-00004
Process: 008

Emission Point: 00004
Emission Source: GTC04

Emission Unit: U-00004
Process: P10

Emission Point: 00004
Emission Source: GT004

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Emission Unit: U-00004
Process: P10

Emission Point: 00004
Emission Source: GTC04

Emission Unit: U-00006
Process: 013

Emission Point: 00006
Emission Source: GT006

Emission Unit: U-00006
Process: 013

Emission Point: 00006
Emission Source: GTC06

Emission Unit: U-00006
Process: 015

Emission Point: 00006
Emission Source: GT006

Emission Unit: U-00006
Process: 015

Emission Point: 00006
Emission Source: GTC06

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 26.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The total maximum combined operating hours at 70 % load, firing # 2 fuel oil (Processes 008 & 013), and for at 70% load, firing natural gas (Processes P10 & 015), in the two Siemens Model 400-GT combustion turbines (Emission Sources GT004 & GT006) with maximum heat input rating of 110.6 MM Btu/hr each is 7,000 hours/year (except during start-up and shut-down) after acceptance by the Administrator of stack testing proving PM-10/Particulates emissions of less than or equal to 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) when firing # 2 fuel oil, and equal to 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) when firing natural gas. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same tow combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Work Practice Type: HOURS PER YEAR OPERATION

Parameter Monitored: FUEL CONSUMPTION

Upper Permit Limit: 7,000 hours per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 27: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 27.1:

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:

40 CFR 52.21

Item 27.2:

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

Item 27.3:

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 27.4:

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 27.5:

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 27.6:

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

Emission Unit: U-00004
Process: 007

Emission Point: 00004
Emission Source: GT004

Emission Unit: U-00004
Process: 007

Emission Point: 00004
Emission Source: GTC04

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GTC04

Emission Unit: U-00006 Emission Point: 00006
Process: 012 Emission Source: GT006

Emission Unit: U-00006 Emission Point: 00006
Process: 012 Emission Source: GTC06

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GTC06

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

Item 27.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Maximum operating hours on # 2 fuel oil for comined Processes 007 & 012 at maximum load (100%) and Processes 008 & 013 at minimum load (70 %) for the two Siemens Model 400-GT combustion turbines (Emission Sources GT004 & GT006) shall not exceed 720 hours/year prior to approved stack test at any load. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less. PM-10/Particulates emission test is limited to 25.0 mg/NM3 or less on # 2 fuel oil (Processes 007 & 012) and to 30.0 mg/NM3 or less on # 2 fuel oil (Processes 008 & 013) prior to approved stack test.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same tow combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Work Practice Type: HOURS PER YEAR OPERATION
Parameter Monitored: NUMBER 2 OIL
Upper Permit Limit: 720 hours per year
Monitoring Frequency: DAILY
Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 28: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 28.1:

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 28.2:

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

Item 28.3:

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 28.4:

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 28.5:

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 28.6:

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

Emission Unit: U-00001
Process: 001

Emission Point: 00001
Emission Source: 00001

Emission Unit: U-00002
Process: 003

Emission Point: 00002
Emission Source: 00002

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Regulated Contaminant(s):

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

Item 28.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Number 6 fuel oil use in Boiler 00001 (Emission Source 00001) or Boiler 00002 (Emission Source 00002) shall not exceed 1.3 million gallons per year. Total # 6 fuel oil use in Boilers 00001 (Emission Source 00001) and Boiler 00002 (Emission Source 00002) combined shall not exceed 1.3 million gallons per year (Annual maximum rolled daily). Natural gas use will be reduced by the amount of # 2 fuel oil used, by the ratio of 370 cubic feet of natural gas to one gallon of # 2 fuel oil burned.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NUMBER 6 OIL

Upper Permit Limit: 1.3 million gallons

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 29: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 29.1:

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:

40 CFR 52.21

Item 29.2:

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

Item 29.3:

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



other state and federal air pollution control requirements, regulations or law.

Item 29.4:

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 29.5:

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 29.6:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: U-00004 Process: 007	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 007	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00006 Process: 012	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 012	Emission Point: 00006 Emission Source: GTC06
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GTC06

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

Item 29.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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



Monitoring Description:

Maximum total operating hours on # 2 fuel oil for combined Processes 007 & 012 at maximum load (100%) and Processes 008 & 013 at minimum load (70 %) for the two combined Siemens Model 400-GT combustion turbines (Emission Sources GT004 & GT006) shall not exceed 3,460 hours/year at any load, calculated on a daily rolling basis, following acceptance by the Administrator of stack tests proving PM-10/Particulates emissions on # 2 fuel oil of less than or equal to 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) at 100% load, and 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) at 70% load.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same two combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less. PM-10/Particulates emission test is limited to 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) or less on # 2 fuel oil at 100% load (Processes 007 & 012) and to 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) or less on # 2 fuel oil at 70 % load (Processes 008 & 013) after approval of the stack test.

Work Practice Type: HOURS PER YEAR OPERATION

Parameter Monitored: NUMBER 2 OIL

Upper Permit Limit: 3460 hours per year

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 30: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 30.1:

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 231-2.7 (b)

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 30.2:

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

Item 30.3:

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 30.4:

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 30.5:

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 30.6:

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

Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00004 Process: P10	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: P10	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GTC06
Emission Unit: U-00006 Process: 015	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 015	Emission Point: 00006 Emission Source: GTC06

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 30.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The total maximum operating hours at 70 % load for firing # 2 fuel oil (Processes 008 & 013), and for firing natural gas (Processes P10 & 015), in the two Siemens Model 400-GT combustion turbines (Emission Sources GT004 & GT006) with maximum heat input rating of 110.6 MM Btu/hr each is 5,820 hours/year (except during start-up and shut-down) prior to approved PM-10/Particulates stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same tow combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Work Practice Type: HOURS PER YEAR OPERATION

Parameter Monitored: FUEL CONSUMPTION

Upper Permit Limit: 5820 hours per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 31: Capping Monitoring Condition

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 31.1:

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:

40 CFR 52.21 (j)

Item 31.2:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 31.3:

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 31.4:

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 31.5:

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 31.6:

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

Emission Unit: U-00004 Process: 007	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 007	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00004 Process: 009	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 009	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00004 Process: P10	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: P10	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00006	Emission Point: 00006

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Process: 012	Emission Source: GT006
Emission Unit: U-00006 Process: 012	Emission Point: 00006 Emission Source: GTC06
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GTC06
Emission Unit: U-00006 Process: 014	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 014	Emission Point: 00006 Emission Source: GTC06
Emission Unit: U-00006 Process: 015	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006 Process: 015	Emission Point: 00006 Emission Source: GTC06

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

Item 31.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Total maximum hours of operation on # 2 fuel oil and on natural gas is limited to 14,000 hours per year for the combined facility gas combustion turbines (Emission Sources GT004 & GT006), calculated on a daily rolling basis. Therefore, at all loads, total combined operation of the two gas combustion turbines (Emission Sources GT004 & GT006) on # 2 fuel oil and on natural gas is limited to 14,000 hours per year. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same tow combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Work Practice Type: HOURS PER YEAR OPERATION

Parameter Monitored: FUEL CONSUMPTION

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Upper Permit Limit: 14000 hours
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: DAILY
Averaging Method: ANNUAL MAXIMUM ROLLED DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 32: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 32.1:

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:

40 CFR 52.21

Item 32.2:

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

Item 32.3:

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 32.4:

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 32.5:

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 32.6:

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

Emission Unit: U-00004
Process: 008

Emission Point: 00004
Emission Source: GT004



Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GTC04

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GTC06

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

Item 32.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Maximum total operating hours on distillate oil (# 2 fuel oil) at minimum load (70 %) for Processes 008 & 013 shall not exceed 300 hours/year prior to approved stack test. Processes 8 & 013 is the firing of distillate oil (# 2 fuel oil) in the two combined Siemens Model 400-GT combustion turbines (Emission Sources GT004 & GT006) with maximum heat input rating of 109.5 MM Btu/hr each at 70 % load. The maximum operating hours for both combustion turbines at 70 % load (except during start-up and shut-down) is 300 hours/year on # 2 fuel oil, prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less. PM-10/Particulates emission test is limited to 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) or less on # 2 fuel oil at 70 % load.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same tow combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Work Practice Type: HOURS PER YEAR OPERATION

Parameter Monitored: NUMBER 2 OIL

Upper Permit Limit: 300 hours per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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



Condition 33: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

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:

40 CFR 52.21 (j)

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: U-00004 Process: 008	Emission Point: 00004 Emission Source: GT004
Emission Unit: U-00004 Process: 008	Emission Point: 00004 Emission Source: GTC04
Emission Unit: U-00006 Process: 013	Emission Point: 00006 Emission Source: GT006
Emission Unit: U-00006	Emission Point: 00006



Process: 013

Emission Source: GTC06

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

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:

Maximum total operating hours for the firing of distillate oil (# 2 fuel oil) at 70% load (Processes 008 & 013) in the two combined Siemens Model 400-GT combustion turbines (Emission Sources GT004 & GT006) with maximum heat input rating of 109.5 MM Btu/hr each at 70 % load (except during start-up and shut-down) is 1,730 hours per year after acceptance by the Administrator of stack testing proving PM-10/Particulates of less than or equal to 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂). Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

The maximum heat input rating of the two Siemens combustion turbines (Emission Sources GT004 & GT006) at full load (100%) is 138.5 MM Btu/hr each, and the minimum heat input rating of the same tow combustion turbines at low load (70%) is 91.4 MM Btu/hr each.

Work Practice Type: HOURS PER YEAR OPERATION

Parameter Monitored: NUMBER 2 OIL

Upper Permit Limit: 1730 hours per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 34: Capping Monitoring Condition

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 34.1:

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:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



6 NYCRR Subpart 231-2

Item 34.2:

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

Item 34.3:

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 34.4:

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 34.5:

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 34.6:

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

Emission Unit: U-00001	Emission Point: 00001
Process: 002	Emission Source: 00001
Emission Unit: U-00002	Emission Point: 00002
Process: 004	Emission Source: 00002
Regulated Contaminant(s):	
CAS No: 0NY210-00-0	OXIDES OF NITROGEN

Item 34.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Natural gas use in Boiler 00001 (Emission Source 00001) or Boiler 00002 (Emission Source 00002) shall not exceed 1,040 million cubic feet per year. Total natural gas use in Boilers 00001 (Emission Source 00001) and Boiler 00002 (Emission Source 00002) combined shall not exceed 1,040 million cubic feet per year (Annual maximum rolled daily).

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Allowed natural gas use shall be reduced by any # 6 fuel oil consumed by the ratio of 370 cubic feet of natural gas per gallon of oil burned.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NATURAL GAS

Upper Permit Limit: 1,040,000 1000 cubic feet

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 35: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 35.1:

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 35.2:

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

Item 35.3:

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 35.4:

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 35.5:

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 35.6:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Emission Unit: U-00004
Process: 011

Emission Point: 00004
Emission Source: GTC04

Emission Unit: U-00006
Process: 016

Emission Point: 00006
Emission Source: GTC06

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

Item 35.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The total combined natural gas consumption for Processes 011 & 016, which are the the firing of natural gas in the two Forney Model 5156-IST duct burners (Emission Control GTC04 & GTC06; respectively) associated with the two combustion turbines (Emission Sources GT004 & GT006; respectively), the total fuel consumption for both duct burners is limited to 320 MMCF/year. The PM-10/Particulates emissions is limited to 0.01 lb/MM Btu before and after the stack test.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NATURAL GAS

Upper Permit Limit: 320 million cubic feet per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 36: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 202-1.2

Item 36.1:

The Compliance Certification activity will be performed for the Facility.

Item 36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



If a stack test is required, notify the Commissioner of the stack test date and submit testing protocol and procedures for approval at least 30 days prior to the scheduled test date.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 37: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 202-1.3

Item 37.1:

The Compliance Certification activity will be performed for the Facility.

Item 37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

If a stack test is performed, submit the stack test results within 60 days of test.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 38: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 202-2

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:

Submit annual emission statement to NYSDEC by April 15 for previous year's operation. Maintain records for five years.

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 105 days after the reporting period.

The initial report is due 4/15/2009.

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Condition 39: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 204-1

Item 39.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 39.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

In compliance with NYSDEC Order of Consent Case Number R2-200409116-239, Riverbay will limit total NOx emissions at the facility to 71 tons per year during the 2006 control period (May 1 through September 30), and to 70 tons during the 2007 control period, and to 85 tons during the 2008 control period. If NOx emissions during any control period exceed these limits, Riverbay shall obtain and surrender to NYSDEC NOx allowances to account for the NOx emissions that exceed said limit by November 30th of that year.

The facility shall install a NOx monitoring system to meet the requirements of 6 NYCRR Part 204, including the automated data acquisition and handling system, and demonstrate compliance with the initial certification testing requirements under 40 CFR 75.20. Riverbay shall submit NOx Budget annual reports and maintain all required records for five years.

Parameter Monitored: OXIDES OF NITROGEN

Lower Permit Limit: 70 tons per year

Upper Permit Limit: 85 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED
RANGE AT ANY TIME

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 40: Contents of reports and compliance certifications.
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 204-4.1



Item 40.1: The NOx authorized account representative shall include in the compliance certification report the following elements, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx Budget emissions limitation for the control period covered by the report:

- (1) Identification of each NOx Budget unit; and
- (2) In the compliance certification report the NOx authorized account representative shall certify, based on reasonable inquiry of those persons with primary responsibility for operating the source and the NOx Budget units at the source in compliance with the NOx Budget Trading Program, whether each NOx Budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx Budget Trading Program applicable to the unit, including:
 - (i) Whether the unit was operated in compliance with the NOx Budget emissions limitation;
 - (ii) Whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with Subpart 204-8;
 - (iii) Whether all the NOx emissions from the unit, or a group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with Subpart 204-8. If conditional data were reported, the owner or operator shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions has been made;
 - (iv) Whether the facts that form the basis for certification under Subpart 204-8 of each monitor at the unit or a group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under Subpart 204-8, if any, has changed; and
 - (v) If a change is required to be reported under item (iv) above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor recertification.

At the NOx authorized account representative's option the following may be included in the compliance certification report:

- (1) The serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under Section 204-6.5 for the control period; and
- (2) For units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with Subpart 204-8, the percentage of NOx allowances that is to be deducted from each unit's compliance account under Subdivision 204-6.5(e).

Condition 41: Requirements for installation, certification, and data accounting.

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 204-8.1

Item 41.1: The owner or operator of each NOx Budget unit must meet the following requirements. These provisions also apply to a unit for which an application for a NOx Budget opt-in permit is submitted and not denied or withdrawn, as provided in Subpart 204-9:



- (1) Install all monitoring systems required under this Subpart for monitoring NO_x mass. This includes all systems required to monitor NO_x emission rate, NO_x concentration, heat input, and flow, in accordance with 40 CFR 75.71 and 75.72.
- (2) Install all monitoring systems for monitoring heat input, if required under Section 204-8.7 for developing NO_x allowance allocations.
- (3) Successfully complete all certification tests required under Section 204-8.2 and meet all other provisions of this Subpart and 40 CFR Part 75 applicable to the monitoring systems under paragraphs (a)(1) and (2) of this section.
- (4) Record and report data from the monitoring systems under paragraphs (a)(1) and (2) of this section.

Condition 1-4: Air pollution prohibited
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 211.1

Item 1-4.1:

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

Condition 42: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 225-1.2 (a) (2)

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:

Provide semi-annual reports to NYSDEC on fuel analysis, quantity of fuel received, daily amount of fuel burned, and results of any stack sampling, stack monitoring, or any procedures required to assure compliance with 6 NYCRR 225-1. The facility shall not use distillate fuel oil with greater than 15 ppm by weight sulfur. Fuel supplier shall provide certification that sulfur is less than 15 ppm for all fuel deliveries.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 15 parts per million 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.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 43: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-1.3

Item 43.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 43.2:

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 combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 44: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.4 (a)

Item 44.1:

The Compliance Certification activity will be performed for the Facility.



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

Item 44.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Effective May 31, 1995, any owner or operator of a very large boiler (> 250 MM Btu/hr) must comply with the NO_x RACT emission limit. The facility's 24 hour average of NO_x emissions must be equal to or below 0.25 pounds per MM Btu for very large boilers (boiler configuration -wall > 250 MM Btu/hr) operating on gas/oil during the ozone season (May 1st to September 30th). Compliance with this emission limit shall be determined on a 24 hour average in accordance with the provisions of section 227-2.6 (a)(1) of this Subpart.

The averaging method is the 24 hour daily average (arithmetic mean) of NO_x emissions and it must be calculated as defined in 6 NYCRR 227-2.6(b)(3)(i)(c) as:

The owner/operator of a combustion installation subject to 6 NYCRR 227-2.6(a)(1) and 6 NYCRR 227-2.6(a)(2) shall:

Determine the 24-hour daily arithmetic average NO_x emission rate based on the arithmetic average of the block hourly arithmetic average emission rates during each 24 hour daily period from 12:00 a.m. to 12:00 a.m. the following day using CEMS data. The block hourly arithmetic average emission rate shall be calculated for each one hour period starting with the period 12:00 a.m. to 1:00 a.m. and continuing through until the last period 11:00 p.m. to 12:00 a.m.; or, starting with the period 12:00 p.m. to 1:00 p.m. and continuing through the last period 11:00 a.m. to 12:00 p.m.

RACT (Reasonably available control technology for major facilities) is defined in 6 NYCRR Part 212 and Regulation 6 NYCRR 201-1.4 (d), Unavoidable noncompliance and violations requires the facilities to use RACT in the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner/or operator shall take appropriate action to prevent emissions, which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



commissioner shall be applied during maintenance, start-up/shutdown or malfunction condition subject to this subdivision.

At the discretion of the commissioner, a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The facility must take appropriate actions, adhere to recordkeeping and reporting requirements in such circumstances to prevent exceeding emissions limit.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Manufacturer Name/Model Number: SIEMENS 600 NOxMAT

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.25 pounds per million Btus

Reference Test Method: 40 CFR 75 Appendix A

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 45: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (a)

Item 45.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 45.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Effective May 31, 1995, any owner or operator of a very large boiler (> 250 MM Btu/hr) must comply with the NOx RACT emission limit. The facility's 30 day rolling average of NOx emissions must be equal to or below 0.25 pounds per MM Btu for very large boilers (boiler configuration - wall > 250 MM Btu/hr) operating on gas/oil during the non-ozone season (October 1st to April 30th). Compliance with this emission limit shall be determined on a 30 day rolling average in accordance with the provisions of section 227-2.6 (a)(1) of this Subpart.



RACT (Reasonably available control technology for major facilities) is defined in 6 NYCRR Part 212 and Regulation 6 NYCRR 201-1.4 (d), Unavoidable noncompliance and violations requires the facilities to use RACT in the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner/or operator shall take appropriate action to prevent emissions, which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner shall be applied during maintenance, start-up/shutdown or malfunction condition subject to this subdivision.

At the discretion of the commissioner, a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The facility must take appropriate actions, adhere to recordkeeping and reporting requirements in such circumstances to prevent exceeding emissions limit.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Manufacturer Name/Model Number: SIEMENS 600 NOxMAT
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.25 pounds per million Btus
Reference Test Method: 40 CFR 75 Appendix A
Monitoring Frequency: CONTINUOUS
Averaging Method: 30-DAY ROLLING AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 46: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b) (3) (i)

Item 46.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 46.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

For Boilers 00001 & 00002 (Emission Sources 00001 & 00002; respectively, the owner and/or operator shall:

(a) calculate all 24-hour daily arithmetic average NO_x emission rates from block hourly arithmetic emission rate averages calculated using data points generated by the CEMS and expressed in terms of pounds of NO_x per million BTU;

(b) demonstrate compliance with the appropriate emission limit by using CEMS for measuring NO_x and calculating a 24-hour daily arithmetic average NO_x emission rate using 40 CFR 60, Appendix A, Method 19. A 30 day rolling average may be used to demonstrate compliance with the appropriate emission limit from October 1 to April 30;

(c) determine the 24-hour daily arithmetic average NO_x emission rate based on the arithmetic average of the block hourly arithmetic average emission rates during each 24 hour daily period from 12:00 a.m. to 12:00 a.m. the following day using CEMS data. The block hourly arithmetic average emission rate shall be calculated for each one hour period starting with the period 12:00 a.m. to 1:00 a.m. and continuing through the last period 11:00 p.m. to 12:00 a.m., or starting with the period 12:00 p.m. to 1:00 p.m. and continuing through the last period 11:00 a.m. to 12:00 p.m. The 30 day rolling average shall be the average of the 24 hour daily arithmetic NO_x emission rates for a 30 day period: and

(d) use at least three data points, collected at 15 minute intervals, to calculate the block hourly arithmetic average emission rates to be used in calculating the 24 hour daily arithmetic average NO_x emission rate.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 47: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 72.9, Subpart A

Item 47.1:

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

Emission Unit: U-00004

Emission Point: 00004



Emission Unit: U-00006 Emission Point: 00006

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

Item 47.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

40 CFR Part 72.9 lists the requirements for permits, monitoring, SO₂ allowances, recordkeeping and reporting. Sulfur dioxide emissions will be calculated hourly based on fuel usage and sulfur content in accordance with 40 CFR 60 Subpart GG, 40 CFR 72, and 40 CFR 75.

The Riverbay gas turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006) will be exempt from 40 CFR 72, as long as the combined two gas turbines are not an "affected unit" as defined under 40 CFR 72.6 (b) (4) (ii) by supplying "equal to or less than 219,000 MWe-hrs actual electrical output on an annual basis to any utility power distribution system for sale".

If the facility exceeds the limit of 219,000 megawatt hour electrical output, then the facility is required to continuously monitor the sulfur dioxide using 1-hour average and submit quarterly reports.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: ELECTRICAL OUTPUT

Upper Permit Limit: 219,000 megawatt-hours per year

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 48: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 75.11(d), Subpart B

Item 48.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Emission Unit: U-00004

Emission Point: 00004

Emission Unit: U-00006

Emission Point: 00006

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The Riverbay gas turbines will be exempt from 40 CFR 75, as long as the gas turbines are not an "affected unit" as defined under 40 CFR 72.6 (b) (4) (ii) by supplying "equal to or less than 219,000 MWe-hrs actual electrical output on an annual basis to any utility power distribution system for sale".

Permit limit is 219,000 Mwe-hr electrical output supplied to any utility. Otherwise, 40 CFR Part 75.11 applies and it lists the requirements for permits, monitoring, SO₂ allowances, recordkeeping and reporting. Sulfur dioxide emissions will be calculated hourly based on fuel usage and sulfur content in accordance with 40 CFR 60 Subpart GG, 40 CFR 72, and 40 CFR 75.

If the facility exceeds the limit of 219,000 megawatt hour electrical output, then the facility is required to keep records of the continuous monitoring of the sulfur dioxide using 1-hour average for submitting the required quarterly reports. Then, the facility will monitor SO₂ emissions in accordance with Appendix D of this Part. Sulfur dioxide emissions will be calculated hourly based on fuel usage and sulfur content in accordance with 40 CFR 60 Subpart GG, 40 CFR 72, and 40 CFR 75.

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 49: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 75.20, Subpart C

Item 49.1:

The Compliance Certification activity will be performed for the Facility.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 49.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Acid Precipitation: CEM operation and maintenance requirements - certification and recertification procedures:

Whenever the owner or operator makes a replacement, modification, or change in the certified continuous emission monitoring system or continuous opacity monitoring system (which includes the automated data acquisition and handling system, and, where applicable, the CO2 continuous emission monitoring system), that significantly affects the ability of the system to measure or record the SO2 concentration, volumetric gas flow, SO2 mass emissions, NOx emission rate, CO2 concentration, or opacity, or to meet the requirements of appendix B of this 40 CFR 75, the owner or operator shall recertify the continuous emission monitoring system, continuous opacity monitoring system, or component thereof according to the procedures in 40 CFR 75. Examples of changes which require recertification include: replacement of the analytical method, including the analyzer; change in location or orientation of the sampling probe or site; rebuilding of the analyzer or all monitoring system equipment; and replacement of an existing continuous emission monitoring system or continuous opacity monitoring system.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

**Condition 50: Emission Point Definition By Emission Unit
Effective between the dates of 02/26/2008 and 02/25/2013**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 50.1(From Mod 1):

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

Emission Unit: U-00004

Emission Point: 00004

Height (ft.): 150

Length (in.): 92

Width (in.): 34

NYTMN (km.): 4525.023

NYTME (km.): 598.833

Building: PPLANT



Item 50.2(From Mod 1):

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

Emission Unit: U-00006

Emission Point: 00006

Height (ft.): 150 Length (in.): 92 Width (in.): 34
NYTMN (km.): 4525.023 NYTME (km.): 598.833 Building: PPLANT

Item 50.3(From Mod 0):

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

Emission Unit: U-00001

Emission Point: 00001

Height (ft.): 138 Diameter (in.): 82
NYTMN (km.): 4525.023 NYTME (km.): 598.833 Building: PPLANT

Item 50.4(From Mod 0):

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

Emission Unit: U-00002

Emission Point: 00002

Height (ft.): 138 Diameter (in.): 82
NYTMN (km.): 4525.023 NYTME (km.): 598.833 Building: PPLANT

Item 50.5(From Mod 0):

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

Emission Unit: U-00003

Emission Point: 00003

Height (ft.): 138 Diameter (in.): 82
NYTMN (km.): 4525.023 NYTME (km.): 598.833 Building: PPLANT

Condition 51: Process Definition By Emission Unit

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 51.1(From Mod 1):

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

Emission Unit: U-00004

Process: 007

Source Classification Code: 2-04-003-03

Process Description:

Process 007 is the firing of ultra low sulfur 15 ppm by weight distillate fuel oil in the Siemens Model 400-GT combustion turbine (Emission Source GT004) in Emission Unit U-00004, with maximum heat input rating of 138.5 MM Btu/hr. CO and VOC emissions are controlled with an

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



oxidation catalyst. NO_x emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Process operation at maximum load (100 %). Maximum operating hours on oil is 2,160 hours/year, following approved stack test PM-10 emission test of 15.0 mg/NM₃ or less. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT004 - Combustion

Emission Source/Control: GTC04 - Control

Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.2(From Mod 1):

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

Emission Unit: U-00004

Process: 008

Source Classification Code: 2-04-003-03

Process Description:

Process 008 is the firing of ultra low sulfur distillate fuel oil (<15 ppm S) in the Siemens Model 400-GT combustion turbine (Emission Source GT004) in Emission Unit U-00004, with heat input rating of 109.5 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NO_x emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Process operation at minimum load of 70 % (except during start-up or shut-down). Maximum operating hours on oil at low load is 1,080 hours/year, following approved stack test PM-10 emission test of 30 mg/NM₃ or less. Maximum operating hours at low load on oil shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT004 - Combustion

Emission Source/Control: GTC04 - Control

Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.3(From Mod 1):

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

Emission Unit: U-00004

Process: 009

Source Classification Code: 2-04-003-01

Process Description:

Process 009 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source GT004) in



Emission Unit U-00004 with maximum heat input rating of 139.6 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Process operation at maximum load (100 %). Maximum operating hours for both gas turbines (U-00004 and U-00006) is 14,000 hours/year. Maximum operating hours on oil is 2,160 hours/year per turbine, following approved stack test PM-10 emissions test of 15 mg/NM3 or less on oil and 7.5 mg/NM3 on gas. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT004 - Combustion

Emission Source/Control: GTC04 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.4(From Mod 1):

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

Emission Unit: U-00004
Process: 011 Source Classification Code: 2-04-003-01
Process Description:

Process 011 is the firing of natural gas in the Forney Model 5156-IST duct burner (Emission Control GTC04) in Emission Unit U-00004 with maximum heat input rating of 60.7 MMBtu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Maximum total fuel consumption for both duct burners is 320 MMCF/year.

Emission Source/Control: GT004 - Combustion

Emission Source/Control: GTC04 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.5(From Mod 1):

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

Emission Unit: U-00004
Process: P10 Source Classification Code: 2-04-003-01
Process Description:

Process P10 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source U-GT006) in Emission Unit U-00006 with maximum heat input rating of 110.6 MM Btu/hr at 70 % load. CO and VOC emissions are



controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at minimum load is 70 % (except during start-up or shut-down). Maximum total operating hours for both gas turbines (U-00004 and U-00006) at low load is 7,000 hours/year. Maximum operating hours on oil at minimum load is 1,080 hours/year, following approved stack test PM-10 emission test of 30 mg/NM3 or less on oil and 15 mg/NM3 or less on gas. Maximum operating hours on oil at minimum load shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT004 - Combustion

Emission Source/Control: GTC04 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.6(From Mod 1):

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

Emission Unit: U-00006
Process: 012 Source Classification Code: 2-04-003-03
Process Description:

Process 012 is the firing of ultra low sulfur distillate fuel oil (<15 ppm S) in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006, with maximum heat input rating of 138.5 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at maximum load (100 %). Maximum operating hours on oil is 2,160 hours/year, following approved stack test PM-10 emission test of 15 mg/NM3 or less. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT006 - Combustion

Emission Source/Control: GTC06 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.7(From Mod 1):

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

Emission Unit: U-00006
Process: 013 Source Classification Code: 2-04-003-03



Process Description:

Process 013 is the firing of ultra low sulfur distillate fuel oil (<15 ppm S) in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006, with heat input rating of 109.5 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at minimum load of 70 % (except during start-up or shut-down). Maximum operating hours on oil at low load is 1,080 hours/year, following approved stack test PM-10 emission test of 30 mg/NM3 or less. Maximum operating hours at low load on oil shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT006 - Combustion

Emission Source/Control: GTC06 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.8(From Mod 1):

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

Emission Unit: U-00006

Process: 014

Source Classification Code: 2-04-003-01

Process Description:

Process 014 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006 with maximum heat input rating of 139.6 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at maximum load. Maximum operating hours for both gas turbines (U-00004 and U-00006) is 14,000 hours/year. Maximum operating hours on oil is 2,160 hours/year per turbine, following approved stack test PM-10 emissions test of 15 mg/NM3 or less on oil and 7.5 mg/NM3 on gas. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT006 - Combustion

Emission Source/Control: GTC06 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.9(From Mod 1):



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

Emission Unit: U-00006

Process: 015

Source Classification Code: 2-04-003-01

Process Description:

Process 015 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006 with maximum heat input rating of 110.6 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. Process operation at minimum load is 70 % (except during start-up or shut-down). Maximum total operating hours for both gas turbines (U-00004 and U-00006) at low load is 7000 hours/year. Maximum operating hours on oil at minimum load is 1,080 hours/year per turbine, following approved stack test PM-10 emission test of 30 mg/NM3 or less on oil and 15 mg/NM3 or less on gas. Maximum operating hours on oil at minimum load shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission Source/Control: GT006 - Combustion

Emission Source/Control: GTC06 - Control

Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.10(From Mod 1):

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

Emission Unit: U-00006

Process: 016

Source Classification Code: 2-04-003-01

Process Description:

Process 016 is the firing of natural gas in the Forney Model 5156-IST duct burner (Emission Control GTC006) in Emission Unit U-00006 with maximum heat input rating of 60.7 MMBtu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Maximum total fuel consumption for both duct burners is 320 MMCF/year.

Emission Source/Control: GT006 - Combustion

Emission Source/Control: GTC06 - Control

Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Item 51.11(From Mod 0):

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



Emission Unit: U-00001
Process: 001 Source Classification Code: 1-03-004-01
Process Description:
Process 001 is the firing of # 6 fuel oil in the Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001. The gas emissions are exhausted through a stack identified as Emission Point 00001.

Emission Source/Control: 00001 - Combustion
Design Capacity: 371 million Btu per hour

Item 51.12(From Mod 0):

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

Emission Unit: U-00001
Process: 002 Source Classification Code: 1-03-006-01
Process Description:
Process 002 is the firing of natural gas in the Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001. The gas emissions are exhausted through a stack identified as Emission Point 00001.

Emission Source/Control: 00001 - Combustion
Design Capacity: 371 million Btu per hour

Item 51.13(From Mod 0):

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

Emission Unit: U-00002
Process: 003 Source Classification Code: 1-03-004-01
Process Description:
Process 003 is the firing of # 6 fuel oil in the Low Pressure Boiler 00002 (Emission Source 00002 in Emission Unit U-00002. The gas emissions are exhausted through a stack identified as Emission Point 00002.

Emission Source/Control: 00002 - Combustion
Design Capacity: 371 million Btu per hour

Item 51.14(From Mod 0):

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

Emission Unit: U-00002
Process: 004 Source Classification Code: 1-03-006-01
Process Description:
Process 004 is the firing of natural gas in the Low Pressure Boiler 00002 (Emission Source 00002 in Emission Unit U-00002. The gas emissions are exhausted through a stack identified as Emission Point 00002.

Emission Source/Control: 00002 - Combustion
Design Capacity: 371 million Btu per hour



Item 51.15(From Mod 0):

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

Emission Unit: U-00003

Process: 005

Source Classification Code: 1-03-004-01

Process Description:

Process 005 consists of the firing of # 2 fuel oil in the new state-of-the art new high pressure and low heat release boiler (Rentech Model D Watertube Boiler), rated at 212 MM BTU/hr on natural gas (Emission Source HPB03 in Emission Unit U-00003), venting to existing stack (Emission Point 00003) for Emission Source HPC03 in Emission Unit U-00003. The new boiler will fire either ultra low sulfur # 2 fuel oil (15 ppm maximum by weight) or natural gas. The new boiler is rated at 206 MM BTU/hr on distillate oil with maximum firing rate of 1,490 gallons per hour. The new boiler will be equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control HPC03). Potential emissions of all criteria air pollutants will be significantly lower for the new boiler.

This is a replacement for the existing high pressure boiler (Emission Source ES004 in Emission Unit U-00005) in the ASF DEC ID # 2-6003-00038/00013 that was issued on 7/27/2006, which is a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and is being de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, is not operational and will be de-commissioned since repair costs are excessive. The existing boiler is rated at 377 MM BTU/hr and is permitted to burn #6 fuel oil or natural gas.

Emission Source/Control: HPB03 - Combustion

Design Capacity: 212 million BTUs per hour

Emission Source/Control: HPC03 - Control

Control Type: LOW NOX BURNERS, FLUE GAS
RECIRCULATION

Item 51.16(From Mod 0):

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

Emission Unit: U-00003

Process: 006

Source Classification Code: 1-03-006-01

Process Description:

Process 006 consists of the firing of natural gas in the new state-of-the art new high pressure and low heat release boiler (Rentech Model D Watertube Boiler), rated at 212 MM BTU/hr (Emission Source HPB03 in Emission Unit



U-00003), venting to existing stack (Emission Point 00003) for Emission Source HPC03 in Emission Unit U-00003. The new boiler will fire either ultra low sulfur # 2 fuel oil (15 ppm maximum by weight) or natural gas. The new boiler is rated at 212 mmbtu/hr with maximum firing rate of 206,000 cubic feet per hour. The new boiler will be equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control HPC03). Potential emissions of all criteria air pollutants will be significantly lower for the new boiler.

This is a replacement for the existing high pressure boiler (Emission Source ES004 in Emission Unit U-00005), in the ASF DEC ID # 2-6003-00038/00013 that was issued on 7/27/2006, which is a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and is being de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, is not operational and will be de-commissioned since repair costs are excessive. The existing boiler is rated at 377 MM BTU/hr and is permitted to burn #6 fuel oil or natural gas.

Emission Source/Control: HPB03 - Combustion
Design Capacity: 212 million BTUs per hour

Emission Source/Control: HPC03 - Control
Control Type: LOW NOX BURNERS, FLUE GAS
RECIRCULATION

Condition 52: Process Permissible Emissions
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 52.1:

The sum of emissions from the regulated process cited shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit:	U-00001	Process:	001
CAS No:	0NY075-00-0	(From Mod 0)	
Name:	PARTICULATES		
PTE(s):	15.1 pounds per hour	0.041 pounds per million Btus	
		7,760 pounds per year	
CAS No:	0NY210-00-0	(From Mod 0)	
Name:	OXIDES OF NITROGEN		
PTE(s):	92.8 pounds per hour	0.25 pounds per million Btus	

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



47,800 pounds per year

Emission Unit: U-00001 Process: 002

CAS No: 0NY075-00-0 (From Mod 0)

Name: PARTICULATES

PTE(s): 2.74 pounds per hour

0.0074 pounds per million Btus

7,920 pounds per year

CAS No: 0NY210-00-0 (From Mod 0)

Name: OXIDES OF NITROGEN

PTE(s): 92.8 pounds per hour

0.25 pounds per million Btus

268,000 pounds per year

Emission Unit: U-00002 Process: 003

CAS No: 0NY075-00-0 (From Mod 0)

Name: PARTICULATES

PTE(s): 15.1 pounds per hour

0.041 pounds per million Btus

7,760 pounds per year

CAS No: 0NY210-00-0 (From Mod 0)

Name: OXIDES OF NITROGEN

PTE(s): 92.8 pounds per hour

0.25 pounds per million Btus

47,800 pounds per year

Emission Unit: U-00002 Process: 004

CAS No: 0NY075-00-0 (From Mod 0)

Name: PARTICULATES

PTE(s): 2.74 pounds per hour

0.0074 pounds per million Btus

7,920 pounds per year

CAS No: 0NY210-00-0 (From Mod 0)

Name: OXIDES OF NITROGEN

PTE(s): 92.8 pounds per hour

0.25 pounds per million Btus

268,000 pounds per year

Emission Unit: U-00003 Process: 005

CAS No: 0NY075-00-0 (From Mod 0)

Name: PARTICULATES

PTE(s): 6.2 pounds per hour

0.03 pounds per million Btus

6,900 pounds per year



CAS No: 0NY210-00-0 (From Mod 0)
Name: OXIDES OF NITROGEN
PTE(s): 75 parts per million by volume (dry, corrected to 15% O2)
21.6 pounds per hour
34,500 pounds per year

Emission Unit: U-00003 Process: 006

CAS No: 0NY075-00-0 (From Mod 0)
Name: PARTICULATES
PTE(s): 1.1 pounds per hour
0.005 pounds per million Btus
9,300 pounds per year

CAS No: 0NY210-00-0 (From Mod 0)
Name: OXIDES OF NITROGEN
PTE(s): 30 parts per million by volume (dry, corrected to 15% O2)
7.7 pounds per hour
67,100 pounds per year

Condition 53: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001

Item 53.2:

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 combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 54: Compliance Certification



Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-1.4 (b)

Item 54.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00001

Item 54.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Each owner or operator required to operate a Continuous Opacity Monitoring System (COMS) in accordance with subsection 227-1.4(a) 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 corporate official as true, accurate and complete and postmarked by the 60th 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:

- (1) 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;
- (2) For each period of excess emission, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS downtime, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS downtime period;
- (4) The total time in which the COMS are required to record data during the reporting period;
- (5) The total number of exceedences and the duration of exceedences expressed as a percentage of the total time in which the COMS are required to record data; and
- (6) Such other things as the Department may deem necessary, proper or desirable in order to enforce Article 19 of the Environmental Conservation Law or the rules promulgated thereunder.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Manufacturer Name/Model Number: COMS - Durag Model 290
Reference Test Method: KEEP RECORDS
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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 55: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (a)

Item 55.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001

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:

Effective May 31, 1995, any owner or operator of a very large boiler (> 250 MM Btu/hr) must comply with the NO_x RACT emission limit. This emission unit's 24 hour average of NO_x emissions must be equal to or below 0.25 pounds per MM Btu for very large boilers (boiler configuration -wall > 250 MM Btu/hr) operating on gas/oil during the ozone season (May 1st to September 30th). Compliance with this emission limit shall be determined on a 24 hour average in accordance with the provisions of section 227-2.6 (a)(1) of this Subpart.

The averaging method is the 24 hour daily average (arithmetic mean) of NO_x emissions and it must be calculated as defined in 6 NYCRR 227-2.6(b)(3)(i)(c) as:

The owner/operator of a combustion installation subject to 6 NYCRR 227-2.6(a)(1) and 6 NYCRR 227-2.6(a)(2) shall:

Determine the 24-hour daily arithmetic average NO_x emission rate based on the arithmetic average of the block hourly arithmetic average emission rates during each 24 hour daily period from 12:00 a.m. to 12:00 a.m. the following day using CEMS data. The block hourly

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



arithmetic average emission rate shall be calculated for each one hour period starting with the period 12:00 a.m. to 1:00 a.m. and continuing through until the last period 11:00 p.m. to 12:00 a.m.; or, starting with the period 12:00 p.m. to 1:00 p.m. and continuing through the last period 11:00 a.m. to 12:00 p.m.

Manufacturer Name/Model Number: SIEMENS 600 NOxMAT
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.25 pounds per million Btus
Reference Test Method: 40 CFR 75 Appendix A
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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 56: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (a)

Item 56.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001

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

Item 56.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Effective May 31, 1995, any owner or operator of a very large boiler (> 250 MM Btu/hr) must comply with the NOx RACT emission limit. This emission unit's 30-day rolling average of NOx emissions must be equal to or below 0.25 pounds per MM Btu for very large boilers (boiler configuration - wall > 250 MM Btu/hr) operating on gas/oil during the non-ozone season (October 1st to April 30th). Compliance with this emission limit shall be determined on a 30-day rolling average in accordance with the provisions of section 227-2.6 (a)(1) of this Subpart.

The averaging method is the 30-day rolling average of NOx emissions and it must be calculated as defined in 6 NYCRR 227-2.6(b)(3)(i)(c) as:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



The owner/operator of a combustion installation subject to 6 NYCRR 227-2.6(a)(1) and 6 NYCRR 227-2.6(a)(2) shall:

Determine the 24-hour daily arithmetic average NO_x emission rate based on the arithmetic average of the block hourly arithmetic average emission rates during each 24 hour daily period from 12:00 a.m. to 12:00 a.m. the following day using CEMS data. The block hourly arithmetic average emission rate shall be calculated for each one hour period starting with the period 12:00 a.m. to 1:00 a.m. and continuing through until the last period 11:00 p.m. to 12:00 a.m.; or, starting with the period 12:00 p.m. to 1:00 p.m. and continuing through the last period 11:00 a.m. to 12:00 p.m. The 30 day rolling average shall be the average of the 24 hour daily arithmetic NO_x emission rates for a 30 day period.

Manufacturer Name/Model Number: SIEMENS 600 NO_xMAT

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.25 pounds per million Btus

Reference Test Method: 40 CFR 75 Appendix A

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 57: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (a) (1)

Item 57.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00001

Regulated Contaminant(s):

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

Item 57.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The owner/operator of very large boilers shall measure NO_x emissions with a continuous emissions monitoring system (CEMS) as described in 6 NYCRR 227-2.6 or with an equivalent monitoring system approved by the department.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Manufacturer Name/Model Number: CEMS - Siemens 600 NOxmat

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.25 pounds per million Btus

Reference Test Method: KEEP RECORDS

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 4/30/2008.

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

Condition 58: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b) (3)

Item 58.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Emission Point: 00001

Regulated Contaminant(s):

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

Item 58.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(b) CEMS Requirements:

(3) CEMS monitoring requirements: Any person who owns or operates a combustion installation subject to paragraphs (a)(1), (2) and (5) of this section shall install, calibrate, maintain, and operate a CEMS for measuring NO_x at locations approved in the final CEMS protocol under paragraph (2) of this subdivision, and shall record the output of each such system. The following procedures and test methods shall be used for determining compliance with the appropriate oxides of nitrogen limit under section 227-2.4 of this Subpart:

(i) The owner/operator of a combustion installation subject to paragraphs (a)(1) and (2) of this section shall:

(a) calculate all 24-hour daily heat input weighted average NO_x emission rates from block hourly arithmetic emission rate averages calculated using data points generated by the CEMS and expressed in terms of pounds of



NO_x per million Btu;

(b') demonstrate compliance with the appropriate emission limit under section 227-2.4 by using a CEMS for measuring NO_x and calculating a 24-hour daily heat input weighted average NO_x emission rate using 40 CFR Part 60, Appendix A, Method 19. A 30 day rolling heat input weighted average may be used to demonstrate compliance with the appropriate emission limit under section 227-2.4 of this Subpart from October 1 to April 30;

(c') determine the 24-hour daily heat input weighted average NO_x emission rate based on the arithmetic average of the block hourly heat input weighted average emission rates during each 24 hour daily period from 12:00 am to 12:00 am the following day using CEMS data. The block hourly heat input weighted average emission rate shall be calculated for each one hour period starting with the period 12:00 am to 1:00 am and continuing through until the last period 11:00 pm to 12:00 am; or, starting with the period 12:00 pm to 1:00 pm and continuing through the last period 11:00 am to 12:00 pm. The 30 day rolling heat input weighted average shall be the average of the 24 hour daily heat input weighted NO_x emission rates for a 30 day period; and

(d') use at least three data points, collected at 15 minute intervals, to calculate the block hourly heat input weighted average emission rates to be used in calculating the 24 hour daily heat input weighted average NO_x emission rate.

(iii) At a minimum, valid CEMS data shall be obtained for 75 percent of the hours per day for 75 percent of the days of the month and 90 percent of the days of the quarter that the affected facility is operating.

(iv) All valid CEMS data shall be used in calculating emission rates even if the minimum data requirements of subparagraph (iii) of this paragraph are not met.

(v) The procedures under 40 CFR 60.13(d),(e) and (f); 40 CFR Part 60, Appendix B, Performance Specification 2; and any additional criteria specified by the Department shall be followed for the installation, evaluation, and operation of the CEMS.

(vi) Quarterly accuracy and daily calibration drift tests shall be performed in accordance with 40 CFR Part 60, Appendix F and any additional data requirements determined

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



appropriate by the Department.

(vii) When NOx emission data are not obtained because of CEMS breakdowns and repairs, emission data shall be obtained by using the 90th percentile value of all CEMS NOx emission data collected over the last 180 days to provide as necessary valid emission data for the minimum requirements in subparagraph (iii) of this paragraph.

Manufacturer Name/Model Number: SIEMENS 600 NOxMAT
Reference Test Method: METHOD 19 APP A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 59: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 59.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001
Process: 001 Emission Source: 00001

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

Item 59.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

To limit SO2 emissions, no person shall, offer for sale, purchase or use # 6 residual fuel oil which contains sulfur in a quantity exceeding maximum percent of sulfur by weight of 0.30. The facility keeps records on file as deliveries are received.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 6 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.30 percent by weight
Reference Test Method: ASTM D-4294
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 60: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-1.2 (a) (1)

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001
Process: 001 Emission Source: 00001

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

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Riverbay Corporation would rely on "continuous opacity monitoring (COMS) ...as a surrogate indication of compliance with particulates emission limit." The particulates emissions may not exceed 0.1 pounds per million BTU's.

Particulate emission limit of 37.1 pounds per hour for Boiler 00001 which has a heating capacity of 371 mm Btu/hr (exceeding 250 mm Btu/hr) and fires fuel oil # 6 during Process 001.

Manufacturer Name/Model Number: CEM
Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.1 pounds per million Btus
Reference Test Method: Method 5/Method 17
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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 61: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 227-2

Item 61.1:



The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001
Process: 001 Emission Source: 00001

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

Item 61.2:

Compliance Certification shall include the following monitoring:

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

Continuous monitoring of NOx emission for Boiler 00001 (Emission Source 00001). The NOx emissions may not exceed 0.25 lbs/MM Btu. The averaging method to be used is the 24 hour daily average (arithmetic mean) and it is to be calculated on a daily basis.

Manufacturer Name/Model Number: SIEMENS 600 NOxMAT
Upper Permit Limit: 0.25 pounds per million Btus
Reference Test Method: METHOD 7E
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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 62: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 227-2

Item 62.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001 Emission Point: 00001
Process: 002 Emission Source: 00001

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

Item 62.2:

Compliance Certification shall include the following monitoring:

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

Continuous monitoring of NOx emission for Boiler 00001 (Emission Source 00001). The NOx emissions may not exceed 0.25 lbs/MM Btu. The averaging method to be used is the

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



24 hour daily average (arithmetic mean) and it is to be calculated on a daily basis.

Manufacturer Name/Model Number: SIEMENS 600 NOxMAT
Upper Permit Limit: 0.25 pounds per million Btus
Reference Test Method: METHOD 7E
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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 63: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 63.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002

Emission Point: 00002

Item 63.2:

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 combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 64: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-1.4 (b)

Item 64.1:

The Compliance Certification activity will be performed for:



Emission Unit: U-00002

Emission Point: 00002

Item 64.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Each owner or operator required to operate a Continuous Opacity Monitoring System (COMS) in accordance with subsection 227-1.4(a) 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 corporate official as true, accurate and complete and postmarked by the 60th 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:

- (1) 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;
- (2) For each period of excess emission, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS downtime, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS downtime period;
- (4) The total time in which the COMS are required to record data during the reporting period;
- (5) The total number of exceedences and the duration of exceedences expressed as a percentage of the total time in which the COMS are required to record data; and
- (6) Such other things as the Department may deem necessary, proper or desirable in order to enforce Article 19 of the Environmental Conservation Law or the rules promulgated thereunder.

Manufacturer Name/Model Number: COMS - Durag Model 290

Reference Test Method: KEEP RECORDS

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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 65: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (a)

Item 65.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002

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

Item 65.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Effective May 31, 1995, any owner or operator of a very large boiler (> 250 MM Btu/hr) must comply with the NO_x RACT emission limit. This emission unit's 30-day rolling average of NO_x emissions must be equal to or below 0.25 pounds per MM Btu for very large boilers (boiler configuration - wall > 250 MM Btu/hr) operating on gas/oil during the non-ozone season (October 1st to April 30th). Compliance with this emission limit shall be determined on a 24 hour average in accordance with the provisions of section 227-2.6 (a)(1) of this Subpart.

The averaging method is the 30-day rolling average of NO_x emissions and it must be calculated as defined in 6 NYCRR 227-2.6(b)(3)(i)(c) as:

The owner/operator of a combustion installation subject to 6 NYCRR 227-2.6(a)(1) and 6 NYCRR 227-2.6(a)(2) shall:

Determine the 24-hour daily arithmetic average NO_x emission rate based on the arithmetic average of the block hourly arithmetic average emission rates during each 24 hour daily period from 12:00 a.m. to 12:00 a.m. the following day using CEMS data. The block hourly arithmetic average emission rate shall be calculated for each one hour period starting with the period 12:00 a.m. to 1:00 a.m. and continuing through until the last period 11:00 p.m. to 12:00 a.m.; or, starting with the period 12:00 p.m. to 1:00 p.m. and continuing through the last period 11:00 a.m. to 12:00 p.m. The 30 day rolling average shall be the average of the 24 hour daily

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



arithmetic NOx emission rates for a 30 day period.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxmat

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.25 pounds per million Btus

Reference Test Method: 40 CFR Appendix A

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 66: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (a)

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002

Emission Point: 00002

Regulated Contaminant(s):

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

Item 66.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Effective May 31, 1995, any owner or operator of a very large boiler (> 250 MM Btu/hr) must comply with the NOx RACT emission limit. This emission unit's 24 hour average of NOx emissions must be equal to or below 0.25 pounds per MM Btu for very large boilers (boiler configuration - wall > 250 MM Btu/hr) operating on gas/oil during the ozone season (May 1st to September 30th). Compliance with this emission limit shall be determined on a 24 hour average in accordance with the provisions of section 227-2.6 (a)(1) of this Subpart.

The averaging method is the 24 hour daily average (arithmetic mean) of NOx emissions and it must be calculated as defined in 6 NYCRR 227-2.6(b)(3)(i)(c) as:

The owner/operator of a combustion installation subject to 6 NYCRR 227-2.6(a)(1) and 6 NYCRR 227-2.6(a)(2) shall:

Determine the 24-hour daily arithmetic average NOx



emission rate based on the arithmetic average of the block hourly arithmetic average emission rates during each 24 hour daily period from 12:00 a.m. to 12:00 a.m. the following day using CEMS data. The block hourly arithmetic average emission rate shall be calculated for each one hour period starting with the period 12:00 a.m. to 1:00 a.m. and continuing through until the last period 11:00 p.m. to 12:00 a.m.; or, starting with the period 12:00 p.m. to 1:00 p.m. and continuing through the last period 11:00 a.m. to 12:00 p.m.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxmat
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.25 pounds per million Btus
Reference Test Method: 40 CFR 75 Appendix A
Monitoring Frequency: CONTINUOUS
Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 67: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (a) (1)

Item 67.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002

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

Item 67.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The owner/operator of very large boilers shall measure NOx emissions with a continuous emissions monitoring system (CEMS) as described in 6 NYCRR 227-2.6 or with an equivalent monitoring system approved by the department.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxmat
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.25 pounds per million Btus
Reference Test Method: KEEP RECORDS
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 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 68: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b) (3)

Item 68.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002

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

Item 68.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

(b) CEMS Requirements:

(3) CEMS monitoring requirements: Any person who owns or operates a combustion installation subject to paragraphs (a)(1), (2) and (5) of this section shall install, calibrate, maintain, and operate a CEMS for measuring NO_x at locations approved in the final CEMS protocol under paragraph (2) of this subdivision, and shall record the output of each such system. The following procedures and test methods shall be used for determining compliance with the appropriate oxides of nitrogen limit under section 227-2.4 of this Subpart:

(i) The owner/operator of a combustion installation subject to paragraphs (a)(1) and (2) of this section shall:

(a) calculate all 24-hour daily heat input weighted average NO_x emission rates from block hourly arithmetic emission rate averages calculated using data points generated by the CEMS and expressed in terms of pounds of NO_x per million Btu;

(b) demonstrate compliance with the appropriate emission limit under section 227-2.4 by using a CEMS for measuring NO_x and calculating a 24-hour daily heat input weighted average NO_x emission rate using 40 CFR Part 60, Appendix A, Method 19. A 30 day rolling



heat input weighted average may be used to demonstrate compliance with the appropriate emission limit under section 227-2.4 of this Subpart from October 1 to April 30;

(c) determine the 24-hour daily heat input weighted average NO_x emission rate based on the arithmetic average of the block hourly heat input weighted average emission rates during each 24 hour daily period from 12:00 am to 12:00 am the following day using CEMS data. The block hourly heat input weighted average emission rate shall be calculated for each one hour period starting with the period 12:00 am to 1:00 am and continuing through until the last period 11:00 pm to 12:00 am; or, starting with the period 12:00 pm to 1:00 pm and continuing through the last period 11:00 am to 12:00 pm. The 30 day rolling heat input weighted average shall be the average of the 24 hour daily heat input weighted NO_x emission rates for a 30 day period; and

(d) use at least three data points, collected at 15 minute intervals, to calculate the block hourly heat input weighted average emission rates to be used in calculating the 24 hour daily heat input weighted average NO_x emission rate.

(iii) At a minimum, valid CEMS data shall be obtained for 75 percent of the hours per day for 75 percent of the days of the month and 90 percent of the days of the quarter that the affected facility is operating.

(iv) All valid CEMS data shall be used in calculating emission rates even if the minimum data requirements of subparagraph (iii) of this paragraph are not met.

(v) The procedures under 40 CFR 60.13(d),(e) and (f); 40 CFR Part 60, Appendix B, Performance Specification 2; and any additional criteria specified by the Department shall be followed for the installation, evaluation, and operation of the CEMS.

(vi) Quarterly accuracy and daily calibration drift tests shall be performed in accordance with 40 CFR Part 60, Appendix F and any additional data requirements determined appropriate by the Department.

(vii) When NO_x emission data are not obtained because of CEMS breakdowns and repairs, emission data shall be obtained by using the 90th percentile value of all CEMS NO_x emission data collected over the last 180 days to provide as necessary valid emission data for the minimum



requirements in subparagraph (iii) of this paragraph.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT
Reference Test Method: METHOD 19 APP A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC MEAN)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 69: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 69.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002
Process: 003 Emission Source: 00002

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

Item 69.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

To limit SO₂ emissions, no person shall sell, offer for sale, purchase or use # 6 residual fuel which contains sulfur in a quantity exceeding maximum percent of sulfur by weight of 0.30. The facility keeps records on file as deliveries are received.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 6 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.30 percent by weight
Reference Test Method: ASTM D-4294
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.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 70: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



Applicable Federal Requirement:6 NYCRR 227-1.2 (a) (1)

Item 70.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002
Process: 003 Emission Source: 00002

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

Item 70.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Riverbay Corporation would rely on "continuous opacity monitoring (COMS) as a surrogate indication of compliance with particulates emission limit." The particulates emissions may not exceed 0.1 pounds per million BTU's.

Particulate emission limit of 37.1 pounds per hour for Boiler 00002 (Emission Source 00002) which has a heating capacity of 371 mm Btu/hr (exceeding 250 mm Btu/hr) and fires fuel oil # 6 during Process 003.

Manufacturer Name/Model Number: COMS - Durag Model 290

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: Method 5/Method 17

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 4/30/2008.

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

Condition 71: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 227-2

Item 71.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002 Emission Point: 00002
Process: 003 Emission Source: 00002

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 71.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Continuous monitoring of NOx emission for Boiler 00002 (Emission Source 00002). The NOx emissions may not exceed 0.25 lbs/MM Btu. The averaging method to be used is the 24 hour average and it is to be calculated on a daily basis.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxmat

Upper Permit Limit: 0.25 pounds per million Btus

Reference Test Method: METHOD 7E

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 4/30/2008.

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

Condition 72: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 227-2

Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002

Emission Point: 00002

Process: 004

Emission Source: 00002

Regulated Contaminant(s):

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

Item 72.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Continuous monitoring of NOx emission for Boiler 00002 (Emission Source 00002). The NOx emissions may not exceed 0.25 lbs/MM Btu. The averaging method to be used is the 24 hour average and it is to be calculated on a daily basis.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxmat

Upper Permit Limit: 0.25 pounds per million Btus

Reference Test Method: METHOD 7E

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 4/30/2008.

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

Condition 73: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 73.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Item 73.2:

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 combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 74: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 74.1:

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

6 NYCRR Subpart 201-6

Item 74.2:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 74.3:

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 74.4:

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 74.5:

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 74.6:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003	Emission Point: 00003
Process: 005	Emission Source: HPB03

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

Item 74.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Number 2 fuel oil use in the 212 MM Btu/hr Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) shall not exceed 2.5 million gallons/year for PM-10 = 0.02 lbs/MM Btu Total number 2 fuel oil use in Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) shall not exceed 2.5 million gallons/year (Annual average rolled daily). Natural gas use will be reduced by the amount of # 2 fuel oil used.

The amount of the 15 ppm maximum sulfur by weight distillate oil (fuel oil # 2) in the 212 MM Btu/hr Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) is limited to 2.5 million gallons per year based on

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



stack test for PM-10 = 0.02 lbs/MM Btu. Until stack test the distillate oil use is limited to 0.8 MM gallons per year based on PM-10 = 0.03 lbs/MM Btu.

Until stack test is conducted and the PM-10 emission is proven to be 0.02 lbs/MM Btu, # 2 fuel oil is limited to 0.8 MM gal/yr based on PM-10 emissions of 0.03 lbs/MM Btu.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NUMBER 2 OIL

Upper Permit Limit: 0.8 million gallons per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 75: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 75.1:

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

6 NYCRR Subpart 201-6

Item 75.2:

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

Item 75.3:

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 75.4:

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 75.5:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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 75.6:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003
Process: 005

Emission Point: 00003
Emission Source: HPB03

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

Item 75.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Number 2 fuel oil use in the 212 MM Btu/hr Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) shall not exceed 2.5 million gallons/year based on stack test for PM-10 = 0.02 lbs/MM Btu. Total number 2 fuel oil use in Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) shall not exceed 2.5 million gallons/year (Annual average rolled daily). Natural gas use will be reduced by the amount of # 2 fuel oil used.

The amount of the 15 ppm maximum sulfur by weight distillate oil (fuel oil # 2) in the 212 MM Btu/hr Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) is limited to 2.5 million gallons per year based on stack test for PM-10 = 0.02 lbs/MM Btu. Until stack test the distillate oil use is limited to 0.8 MM gallons per year based on PM-10 = 0.03 lbs/MM Btu.

Until stack test is conducted and the PM-10 emission is proven to be 0.02 lbs/MM Btu, # 2 fuel oil is limited to 0.8 MM gal/yr based on PM-10 emissions of 0.03 lbs/MM Btu.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NUMBER 2 OIL

Upper Permit Limit: 2.5 million gallons per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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



Condition 76: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (b)

Item 76.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 76.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Effective May 31, 1995, any owner or operator of a large boiler (between 100 and 250 MM Btu/hr) must comply with the listed NO_x RACT emission limit. Compliance with these emission limits shall be determined with a one-hour average in accordance with the provisions of section 227-2.6(a)(3) of this Subpart unless the owner/operator opts to utilize Continuous Emission monitoring Systems (CEMS) under the provisions of section 227-2.6(a)(2) of this Subpart. If a CEMS is utilized, the requirements of section 227-2.6(b) of this Subpart apply, including the use of a 24-hour averaging period.

A large boiler is identified as: a device with maximum heat input capacity greater than 100 million Btu per hour and equal to or less than 250 million Btu per hour, that combusts any fuel and produces steam or heats water or any other heat transfer medium.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003). The NO_x RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btus.

NO_x emission from large boilers burning oil and gas is limited to 0.30 lbs/MM BTU. Compliance will be met based on the Rentech boiler emission guarantee of 0.1 lbs/MM BTU on oil and 0.03 lbs/MM BTU on natural gas. Performance will be confirmed with a Continuous Emission Monitor.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.30 pounds per million Btus

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reference Test Method: METHOD 7, or 7E, or 19
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 77: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 77.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 77.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOx emission from large boilers burning oil and gas is limited to 0.30 lbs/MM BTU. Compliance will be met based on the Rentech boiler emission guarantee of 0.1 lbs/MM BTU on oil and 0.03 lbs/MM BTU on natural gas. Performance will be confirmed with a Continuous Emission Monitor.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003). The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btus.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: EPA METHOD 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 78: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



Applicable Federal Requirement:6 NYCRR 227-2.6 (a) (3)

Item 78.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 78.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The following unit shall perform testing to verify NO_x emissions to demonstrate compliance with this part.

The owner/operator of large boilers (between 100 and 250 MM Btu/hr) shall measure NO_x emissions by performing stack tests described in subdivision (c) of this section. A large boiler is defined as: A device with maximum heat input capacity greater than 100 million Btu per hour and equal to or less than 250 million Btu per hour, that combusts any fuel and produces steam or heats water or any other heat transfer medium.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003). The NO_x RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btu per hour.

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 7/30/2008.

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

Condition 79: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.6 (b)

Item 79.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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:

Riverbay CORP-CO-OP CITY is required to maintain and operate CEM System for NOx emission. The CEM System is required to meet the requirements of 40 CFR Appendices B and F.

(b) CEMS Requirements

(1) The owner or operator of a source subject to paragraph (a)(1), (2), or (5) of this section that is obligated to submit a compliance plan required under section 227-2.3(a) and (b) of this Subpart must submit for department approval:

(i) a preliminary CEMS plan as part of the compliance plan if it has a CEMS in place, or are in the process of procuring or installing CEMS;

(ii) a preliminary CEMS plan at least 180 days prior to equipment installation. The department will notify the owner or operator of the acceptability of the plan, at least 60 days prior to equipment installation if it is not covered under subparagraph (i) of this paragraph; or

(iii) a proposed equivalent monitoring plan.

Compliance with the NOx standard for large boilers burning natural gas and fuel oil will be determined using a Continuous Emissions Monitor (CEM) in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003. The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btu per hour.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: Appendices B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.



The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 80: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (c)

Item 80.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 80.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The following unit shall perform testing to verify NO_x emissions to demonstrate compliance with this part.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003). The NO_x RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btu per hour.

The owner or operator of large boilers (between 100 and 250 MM Btu/hr) shall measure NO_x emissions by performing stack tests described in subdivision (c) of this section.

The NO_x RACT for large boilers (between 100 and 250 MM Btu/hr) operating on gas have a limit of 0.20 pounds per million Btu per hour and those operating on gas/oil have a limit of 0.30 pounds per million Btu per hour.

Stack test requirements: The owner/operator of those facilities required to stack test under subdivision (a) of 6 NYCRR 227-2.6 shall:

1. Submit a compliance test protocol to the department for approval at least 90 days prior to emission testing. The conditions of the testing and the locations of the sampling devices must be acceptable to the department; and
2. Utilize procedures set forth in 40 CFR Part 60,

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NOx limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.

i. For large boilers (between 100 and 250 MM Btu/hr), utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.

3. Submit a compliance test report containing the results of the emission test to the department no later than 60 days after the completion of the emission test.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: METHOD 7, or 7E, or 19

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 81: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 81.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 81.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

1. Submit to the Department an acceptable protocol for the testing of particulate emission limit cited in this condition.

2. Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



emission limit cited in this condition.

3. All records shall be maintained at the facility for a minimum of five years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 82: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.8, NSPS Subpart A

Item 82.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Item 82.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Stack performance tests shall be performed within 60 days after achieving the maximum production rate but not later than 180 days after initial start-up.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 83: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.42b(j), NSPS Subpart Db

Item 83.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Regulated Contaminant(s):

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



CAS No: 007446-09-5 SULFUR DIOXIDE

Item 83.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

40 CFR 60 Subpart Db - standards for sulfur dioxide will be met by compliance with paragraph (j) by firing only ultra low sulfur distillate oil (# 2 fuel oil) that contains no more than 15.0 ppm sulfur by weight. Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil under 40 CFR 60.42b(j). The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by (1) following the performance testing procedures as described in Part 60.45b(c) or Part 60.45b(d), and following the monitoring procedures as described in Part 60.47b(a) or Part 60.47b(b) to determine sulfur dioxide emission rate of fuel oil sulfur content; or (2) obtaining and maintaining fuel receipts and certification from the fuel supplier as described in Part 60.49b(r).

Emission monitoring will be based on 40 CFR 60.47b(f).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million 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.

The initial report is due 7/30/2008.

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

Condition 84: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.43b(b), NSPS Subpart Db

Item 84.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES



Item 84.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Compliance with Particulate emission limits in 40 CFR 60.43(b)(b) is achieved by the use of ultra low sulfur oil (less than 15 ppm sulfur by weight). A one time stack test will be performed to determine PM and PM-10 emissions following the requirement of 40 CFR 60.8, and using procedures described in 40 CFR 60.49.

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 85: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.43b(f), NSPS Subpart Db

Item 85.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 85.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

The facility is exempt from the opacity limits under 40 CFR 60.43b(h)(5) by burning very low sulfur # 2 fuel oil and natural gas. NYSDEC regulations limit discharge into the atmosphere gases that exhibit greater than 20% opacity for a 6-minute average. A Continuous Opacity Monitor (COMS) will be used to monitor opacity.

Manufacturer Name/Model Number: COMS - Durag Model 290

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent by weight
Reference Test Method: Continuous Opacity Monitor
Monitoring Frequency: CONTINUOUS
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 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 86: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.44b(a)(1), NSPS Subpart Db

Item 86.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 86.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen standard for industrial/commercial/institutional steam generating units: The facility shall discharge a maximum of 0.10 lbs/MM BTU of NO_x for low heat release rate large boilers (<70,000 BTU/hr/cu.ft) while firing natural gas or distillate oil. Compliance with the emission limit will be based on a Continuous Emissions Monitor (CEM) in accordance with 40 CFR 60.46b (e) and 40 CFR 60.8. Emission Source HPB03 in Emission Unit U-00003 is a 212 MM BTU/hr high pressure & low heat release boiler, and operates on gas or distillate oil.

Manufacturer Name/Model Number: CEMS - Siemens 600 NO_xMAT

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA METHOD 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 87: Compliance Certification



Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.44b(a)(1), NSPS Subpart Db

Item 87.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 87.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Compliance with the sulfur dioxide emission standard is demonstrated by burning only ultra low sulfur oil (less than 15 ppm sulfur by weight). Compliance is monitored by maintaining records on fuel oil certification provided by the oil supplier with each delivery, indicating that the sulfur content in the fuel oil is less than 15.0 ppm % by weight.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million 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.

The initial report is due 7/30/2008.

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

Condition 88: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.45b(j), NSPS Subpart Db

Item 88.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 88.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Exemption for very low sulfur oil: The owner or operator of an affected facility that combusts ultra low sulfur distillate oil (<15 ppm S by weight) is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

Monitoring Frequency: PER DELIVERY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 89: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.46b(e), NSPS Subpart Db

Item 89.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Regulated Contaminant(s):

CAS No: 0NY210-00-0

OXIDES OF NITROGEN

Item 89.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

To determine compliance with the emission limits for nitrogen oxides required under 40 CFR 60-Db.44b, the owner or operator of an affected facility shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring nitrogen oxides under 40 CFR 60.48(b). The nitrogen oxides limit is 0.10 lbs/MM BTU.

A Continuous Emissions Monitor (CEMS) will be used to monitor compliance with the NO_x standard in accordance with the procedures under 60.48 (b).

Manufacturer Name/Model Number: CEMS - Siemens 600 NO_xMAT

Parameter Monitored: OXIDES OF NITROGEN

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: EPA METHOD 7E
Monitoring Frequency: CONTINUOUS
Averaging Method: 30-DAY AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 90: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.47b(f), NSPS Subpart Db

Item 90.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 90.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The owner or operator of an affected facility that combusts very low sulfur oil is not subject to the emission monitoring requirements of section 40 CFR 60-Db.47b if the owner or operator obtains fuel receipts as described in subdivision 40 CFR 60-Db.49b(r).

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 215 ng/J (0.5 lb/million Btu) heat input.

Facilities demonstrating compliance using the fuel supplier certification, for sulfur-in-fuel limitations (based on a percent by weight of sulfur in the fuel), shall submit the certification in accordance with the provisions of 40 CFR 60-Db.47b.

40 CFR 60-Db.47b(f), NSPS which limits the sulfur content in the residual oil to 0.5 percent by weight is not applicable to this facility. This regulation is superceded by regulation 6 NYCRR 225-1.2(a)(2), which limits the

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



sulfur content in the residual oil to 0.30 percent by weight for facilities in a severe ozone non-attainment area such as New York City.

Riverbay Corp CO-OP City must comply with the 0.20 percent by weight sulfur content limit as per 6 NYCRR 225-1.2(a)(2), which has more stringent limit for New York City than 40 CFR 60-Db.47b(f), NSPS. Records of fuel receipts in accordance with 40 CFR 60.49b(r), indicating fuel sulfur content, are to be maintained on file to determine compliance.

Compliance with the sulfur dioxide emission standard for Riverbay Corp Co-Op City will be based on a certification from the fuel supplier in accordance with 40 CFR 60.49b(r) that each fuel oil delivery is ultra low sulfur distillate oil (less than 15.0 ppm sulfur by weight).

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 15.0 parts per million 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.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 91: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.48b(b), NSPS Subpart Db

Item 91.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 005 Emission Source: HPB03

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

Item 91.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator subject to 40CFR 60-Db.44b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides emissions

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



discharged to the atmosphere and record the output of the system.

Emission Source S0005 is a 212 MM BTU/hr high pressure & low release rate boiler. The NOx emission limit for natural gas and distillate oil for low heat release rate boilers is 0.10 lbs/million BTU.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: Appendices B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 92: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.49b(a), NSPS Subpart Db

Item 92.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 005

Emission Source: HPB03

Item 92.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility will provide notifications to the EPA Administrator of initial start-up, performance test data and CEMS performance evaluation. The facility will maintain records of daily fuel burned, capacity factor, hourly emissions, opacity, RATA and drift tests, 30-day NOx rolling average, excess emissions hours with reasons and corrective actions, excluded data etc.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 93: Capping Monitoring Condition
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 93.1:

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

6 NYCRR Subpart 201-6

Item 93.2:

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

Item 93.3:

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 93.4:

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 93.5:

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 93.6:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Regulated Contaminant(s):

CAS No: 0NY210-00-0

OXIDES OF NITROGEN

Item 93.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Natural gas use in the 212 MM Btu/hr Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03) shall not exceed 1,800 million cubic feet/year minus 320

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



CF/Gal oil. Total natural gas use in Rentech High Pressure & Low Heat Release Boiler (Emission Source HPB03 shall not exceed 1,800 million cubic feet/year (Annual average rolled daily) minus 320 CF/Gal oil. Allowed natural gas use shall be reduced by any # 2 fuel oil consumed by the ratio of 320 cubic feet of natural gas per gallon of oil burned.

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: NATURAL GAS

Upper Permit Limit: 1,800,000 1000 cubic feet

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 94: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.4 (b)

Item 94.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Regulated Contaminant(s):

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

Item 94.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Effective May 31, 1995, any owner or operator of a large boiler (between 100 and 250 MM Btu/hr) must comply with the listed NOx RACT emission limit. Compliance with these emission limits shall be determined with a one-hour average in accordance with the provisions of section 227-2.6(a)(3) of this Subpart unless the owner/operator opts to utilize Continuous Emission monitoring Systems (CEMS) under the provisions of section 227-2.6(a)(2) of this Subpart. If a CEMS is utilized, the requirements of section 227-2.6(b) of this Subpart apply, including the use of a 24-hour averaging period.

A large boiler is identified as: a device with maximum heat input capacity greater than 100 million Btu per hour

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



and equal to or less than 250 million Btu per hour, that combusts any fuel and produces steam or heats water or any other heat transfer medium.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003. The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btus.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.30 pounds per million Btus
Reference Test Method: METHOD 7, or 7E, or 19
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 95: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 95.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 006 Emission Source: HPB03

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

Item 95.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOx emission from large boilers burning oil and gas is limited to 0.30 lbs/MM BTU. Compliance will be met based on the Rentech boiler emission guarantee of 0.1 lbs/MM BTU on oil and 0.03 lbs/MM BTU on natural gas. Performance will be confirmed with a Continuous Emission Monitor.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003. The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btus.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: EPA METHOD 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 96: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (a) (3)

Item 96.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Regulated Contaminant(s):

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

Item 96.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The following unit shall perform testing to verify NOx emissions to demonstrate compliance with this part.

The owner/operator of large boilers (between 100 and 250 MM Btu/hr) shall measure NOx emissions by performing stack tests described in subdivision (c) of this section. A large boiler is defined as: A device with maximum heat input capacity greater than 100 million Btu per hour and equal to or less than 250 million Btu per hour, that combusts any fuel and produces steam or heats water or any other heat transfer medium.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003). The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btu per hour.

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 7/30/2008.

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



Condition 97: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 97.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 006 Emission Source: HPB03

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

Item 97.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Riverbay CORP-CO-OP CITY is required to maintain and operate CEM System for NO_x emission. The CEM System is required to meet the requirements of 40 CFR Appendices B and F.

(b) CEMS Requirements

(1) The owner or operator of a source subject to paragraph (a)(1), (2), or (5) of this section that is obligated to submit a compliance plan required under section 227-2.3(a) and (b) of this Subpart must submit for department approval:

(i) a preliminary CEMS plan as part of the compliance plan if it has a CEMS in place, or are in the process of procuring or installing CEMS;

(ii) a preliminary CEMS plan at least 180 days prior to equipment installation. The department will notify the owner or operator of the acceptability of the plan, at least 60 days prior to equipment installation if it is not covered under subparagraph (i) of this paragraph; or

(iii) a proposed equivalent monitoring plan.

Compliance with the NO_x standard for large boilers burning natural gas and fuel oil will be determined using a Continuous Emissions Monitor (CEM) in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

This condition applies to the 212 MM Btu/hr Rentech Model

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003. The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btu per hour.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: Appendices B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 98: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.6 (c)

Item 98.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Regulated Contaminant(s):

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

Item 98.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The following unit shall perform testing to verify NOx emissions to demonstrate compliance with this part.

This condition applies to the 212 MM Btu/hr Rentech Model D Watertube boiler (Emission Source HPB03 in Emission Unit U-00003. The NOx RACT for large gas/oil boilers is a limit of 0.30 pounds per million Btu per hour.

The owner or operator of large boilers (between 100 and 250 MM Btu/hr) shall measure NOx emissions by performing stack tests described in subdivision (c) of this section.

The NOx RACT for large boilers (between 100 and 250 MM Btu/hr) operating on gas have a limit of 0.20 pounds per million Btu per hour and those operating on gas/oil have a limit of 0.30 pounds per million Btu per hour.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Stack test requirements: The owner/operator of those facilities required to stack test under subdivision (a) of 6 NYCRR 227-2.6 shall:

1. Submit a compliance test protocol to the department for approval at least 90 days prior to emission testing. The conditions of the testing and the locations of the sampling devices must be acceptable to the department; and
2. Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NOx limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.
 - i. For large boilers (between 100 and 250 MM Btu/hr), utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
3. Submit a compliance test report containing the results of the emission test to the department no later than 60 days after the completion of the emission test.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: METHOD 7, or 7E, or 19

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 99: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.8, NSPS Subpart A

Item 99.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Item 99.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Stack performance tests shall be performed within 60 days after achieving the maximum production rate but not later

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



than 180 days after initial start-up.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 100: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.43b(f), NSPS Subpart Db

Item 100.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 006 Emission Source: HPB03

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

Item 100.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

The facility is exempt from the opacity limits under 40 CFR 60.43b(h)(5) by burning very low sulfur # 2 fuel oil and natural gas. NYSDEC regulations limit discharge into the atmosphere gases that exhibit greater than 20% opacity for a 6-minute average. A Continuous Opacity Monitor (COMS) will be used to monitor opacity.

Manufacturer Name/Model Number: COMS - Durag Model 290

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent by weight

Reference Test Method: Continuous Opacity Monitor

Monitoring Frequency: CONTINUOUS

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 7/30/2008.

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

Condition 101: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Applicable Federal Requirement:40CFR 60.46b(e), NSPS Subpart Db

Item 101.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Regulated Contaminant(s):

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

Item 101.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

To determine compliance with the emission limits for nitrogen oxides required under 40 CFR 60-Db.44b, the owner or operator of an affected facility shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring nitrogen oxides under 40 CFR 60.48(b). The nitrogen oxides limit is 0.10 lbs/MM BTU.

A Continuous Emissions Monitor (CEMS) will be used to monitor compliance with the NO_x standard in accordance with the procedures under 60.48 (b).

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA METHOD 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 102: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.48b(b), NSPS Subpart Db

Item 102.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Regulated Contaminant(s):

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 102.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator subject to 40CFR 60-Db.44b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system.

Emission Source HPB03 is a 212 MM BTU/hr high pressure & low release rate boiler. The NOx emission limit for natural gas and distillate oil for low heat release rate boilers is 0.10 lbs/million BTU.

Manufacturer Name/Model Number: CEMS - Siemens 600 NOxMAT

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: Appendices B & F

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 103: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:40CFR 60.49b, NSPS Subpart Db

Item 103.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 006

Emission Source: HPB03

Item 103.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility will provide notifications to the EPA Administrator of initial start-up, performance test data and CEMS performance evaluation. The facility will maintain records of daily fuel burned, capacity factor, hourly emissions, opacity, RATA and drift tests, 30-day NOx rolling average, excess emissions hours with reasons and corrective actions, excluded data etc.

Monitoring Frequency: CONTINUOUS

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 104: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 211.3

Item 104.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 104.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance will be demonstrated with a Continuous Opacity Monitor (COMS) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: COMS - Durag Model 290

Parameter Monitored: OPACITY

Upper Permit Limit: 57 percent

Reference Test Method: 40 CFR 60 Appendix A, Method 9

Monitoring Frequency: CONTINUOUS

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 105: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 225-1.7

Item 105.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 105.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Riverbay Co-Op City will use distillate fuel oil with a sulfur limit of 15.0 parts by million by weight. The sulfur content will be certified by the fuel oil supplier with each delivery to the bulk storage tank, in accordance with 40 CFR 75, Appendix D, Section 2.2.1.2 and 40 CFR 60, section 334 (i)(1). A SO2 monitor will not be required.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 106: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 106.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 106.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

No owner or operator of a combustion installation shall emit greater than 20 percent opacity for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Manufacturer Name/Model Number: COMS - Durag Model DR-290

Parameter Monitored: OPACITY

Upper Permit Limit: 27 percent

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 108.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the opacity limit is demonstrated with a Continuous Opacity Monitor (COMS) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: COMS - Durag Model DR-290

Parameter Monitored: OPACITY

Upper Permit Limit: 27 percent

Reference Test Method: 40 CFR 60 Appendix A, Method 9

Monitoring Frequency: CONTINUOUS

Averaging Method: ONE CONTINUOUS 6-MINUTE PERIOD PER HOUR

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 109: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 109.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 109.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the opacity limit is demonstrated with a Continuous Opacity Monitor (COMs) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: COMS - Durag Model DR-290

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 Appendix A, Method 9

Monitoring Frequency: CONTINUOUS

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 110: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.6 (b)

Item 110.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 110.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbine (Emission Source GT004) burning natural gas will comply with the limit of 42.0 ppmvd @ 15% O₂ in accordance with 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMs) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 42.0 parts per million by volume
(dry, corrected to 15% O₂)

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 111: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.6 (b)

Item 111.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Regulated Contaminant(s):

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

Item 111.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbine (Emission Source GT004) burning distillate oil will comply with the limit of 65.0 ppmvd @ 15% O₂ in accordance with 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emission Monitor (CEMs) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

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

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 112: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 112.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

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

Item 112.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Oxides of Nitrogen emissions in pounds per hour during start-up and shut-down on natural gas, in order to establish an emission limit in pounds per hour for the combustion turbine (Emission Source GT004) operations. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 113: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 113.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 113.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Oxides of Nitrogen emissions in pounds per hour during start-up and shut-down on distillate fuel oil, in order to establish an emission limit in pounds per hour for the combustion turbine (Emission Source GT004) operations. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 114: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 114.1:



The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 114.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Carbon Monoxide emissions in pounds per hour during start-up and shut-down on distillate oil, in order to establish an emission limit in pounds per hour for the combustion turbine (Emission Source GT004) operations. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-5: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-5.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 1-5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The Sulfur Dioxide emission limit is 0.060 pounds per million Btu during natural gas firing in the gas turbine [Processes 009 and P10], Emission Source GT004 in Emission Unit U-00004 based on the higher heating value (HHV) of



the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4. BACT is required.

The sulfur dioxide emission limit is a discrete one hour average based on definition of "natural gas" per §60.331 (u) and the maximum heat input rating of the U-00004 combustion gas turbine. Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and have a gross caloric value between 950 and 1100 Btu per standard cubic foot. The calculated upper limit of sulfur dioxide emissions, assuming 100% conversion of sulfur to sulfur dioxide, is 0.060 lb/MM Btu.

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$(0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.060 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR DIOXIDE
Upper Permit Limit: 0.060 pounds per million Btus
Reference Test Method: 40 CFR 60.334(h)
Monitoring Frequency: SINGLE OCCURRENCE
Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2012.
Subsequent reports are due every 12 calendar month(s).

Condition 116: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 116.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

Regulated Contaminant(s):

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



CAS No: 007446-09-5 SULFUR DIOXIDE

Item 116.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Riverbay Co-Op City will use distillate oil with a sulfur limit of 15.0 parts per million by weight to be certified by the distillate fuel oil supplier for each delivery to the bulk storage tank, in accordance with 40 CFR 75, Appendix D, Section 2.2.1.2 and 40 CFR Part 60, 334 (i)(1).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 117: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 117.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 117.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The sulfur dioxide emission limit is a discrete one hour average based on the continuous recording of distillate oil usage, with heat input corresponding to the higher heating value of the fuel. Compliance will be determined by fuel oil sulfur certification of less than 15.0 parts

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



per million by weight Sulfur provided by supplier with each delivery. Facility gas turbine fuel oil operation is limited to 3,460 total hours/year.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 15.0 parts per million by weight
Reference Test Method: 40 CFR 60.335 Method
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 118: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 118.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 118.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:
The natural gas has been demonstrated to be defined as "pipeline natural gas" under 40 CFR 72.2, with sulfur content less than 0.5 grains/100 dscf. Co-Op City will monitor monthly the sulfur content data from Consolidated Edison.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.5 grains per 100 dscf
Reference Test Method: 40 CFR 60.335 Method
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



The initial report is due 1/30/2009.
Subsequent reports are due every 12 calendar month(s).

Condition 119: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 119.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 119.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NOx CEMS is used to demonstrate compliance with 40 CFR 60, Subpart GG, section 332 (a)(1) in accordance with the certification requirements of 40 CFR 60.334(b), including Appendices B and F, and 40 CFR 75.

Riverbay Co-Op City will employ a NOx CEM as an alternative for monitoring and reporting excess emissions. The CEMS QA/QC Plan' Supporting Document SD-7 was submitted with the Title V renewal application.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR ROLLING AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 120: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 120.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 120.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Riverbay Co-Op City will employ a NO_x CEM as an alternative for monitoring and reporting excess emissions. The CEMS QA/QC Plan's Supporting Document SD-7 was submitted with the Title V renewal application.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 121: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 121.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 121.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NO_x CEMS is used to demonstrate compliance with NO_x emission limits of 75.0 ppmvd @ 15% O₂ burning natural gas under Subpart GG in accordance with the certification requirements of 40 CFR 60 and 40 CFR 75. The permit emission limit is 3.5 ppmvd @ 15% O₂ under normal operating conditions firing natural gas at 70 % load (Process P10).

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 122: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 122.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

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

Item 122.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NO_x CEMS is used to demonstrate compliance with NO_x emission limits of 75.0 ppmvd @ 15% O₂ burning distillate oil under Subpart GG in accordance with the certification requirements of 40 CFR 60 and 40 CFR 75. The permit emission limit is 6.0 ppmvd @ 15% O₂ under normal operating conditions firing distillate fuel oil from 70% to 100% load.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 123: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



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

Item 123.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

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

Item 123.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NOx CEMS is used to demonstrate compliance with NOx emission limits of 75.0 ppmvd @ 15% O2 burning natural gas under Subpart GG in accordance with the certification requirements of 40 CFR 60 and 40 CFR 75. The permit emission limit is 2.5 ppmvd @ 15% O2 under normal operating conditions firing natural gas at 100% load (Process 009).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.5 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 1-6: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-6.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 1-6.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The natural gas combusted at the facility meets definition of "natural gas" per §60.331 (u). Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and a gross caloric value between 950 and 1100 Btu per standard cubic foot. As a result, sulfur dioxide emissions will be calculated using 0.060 lb/MMBtu, in accordance with 40 CFR 75, appendix D, Section 2.3.1.1. Riverbay CO-Op will monitor the monthly sulfur content data from either Consolidated Edison or Iroquois Pipeline.

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$(0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.060 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 20 grains per 100 dscf

Reference Test Method: 40 CFR 60.334(h)

Monitoring Frequency: MONTHLY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 125: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 125.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 125.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Riverbay Co-Op City is proposing a distillate fuel oil sulfur limit of 15.0 ppm by weight to be certified by the fuel supplier with each delivery, in accordance with 40 CFR Part 75, Appendix D, Section 2.2.1.2 and 40 CFR Part 60, 334(i)(1).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 126: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (e) (2) (ii)

Item 126.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 007

Emission Source: GT004

Regulated Contaminant(s):

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

Item 126.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbines (Emission Source GT004) burning distillate oil will comply with the limit of 65.0 ppmvd in accordance with 6 NYCrr 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMS) in accordance with 40 CFR Part 60 Appendix A.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 65.0 parts per million by volume

(dry, corrected to 15% O₂)

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 127: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 127.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 007

Emission Source: GT004

Regulated Contaminant(s):

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

Item 127.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NO_x emission limit is 6.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NO_x emission at the gas turbine exhaust stack. LAER is required. Compliance with the NO_x emission will be determined with the use of CEMS. The reference test method for NO_x is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume

(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.



The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 128: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 128.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 007 Emission Source: GT004

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

Item 128.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Carbon Monoxide emissions in pounds per hour during start-up and shut-down on natural gas, in order to establish an emissions limit in pounds per hour for the combustion turbine (Emission Source GT004) operations. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 129: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 129.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 007 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 129.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A Method 18/25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 130: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 130.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 007

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 000630-08-0

CARBON MONOXIDE

Item 130.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-7: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-7.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 007

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 007664-93-9 SULFURIC ACID

Item 1-7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction. The Sulfuric Acid emission rate limit is 0.212 pounds per hour during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight), or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the combustion turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO catalyst = 0.190956 lbs/hr of H₂SO₄

C = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.212 pounds per hour

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-8: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-8.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 007

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

Item 1-8.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



reduction. The Sulfuric Acid emission rate limit is 0.00161 pounds per million Btu heat input during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004). The emission rate on a per million Btu basis for Emission Unit U-00004 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight), or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the combustion turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO catalyst = 0.190956 lbs/hr of H₂SO₄

C = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212 lbs/hr of Sulfuric Acid

(0.212 lbs/hr of Sulfuric Acid) / (131 MM Btus/hr) = 0.00161 pounds per million Btu

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.00161 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 133: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 133.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004
Process: 007

Emission Point: 00004
Emission Source: GT004

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

Item 133.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The Sulfur Dioxide emission limit is 0.3 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Compliance with the sulfur dioxide emissions will be determined based on fuel firing rate and % sulfur analysis in the fuel oil (15.0 ppm maximum). BACT is required.

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

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.

The initial report is due 7/30/2008.

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

Condition 134: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 134.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004
Process: 007

Emission Point: 00004
Emission Source: GT004

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 134.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

The PM-10 emission limit is 25.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004) in Emission Unit U-00004) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PM-10

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A, Methods 201A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 135: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 135.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 007

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 135.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

The Particulates emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O2) during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

The Particulates emission limit is 25.0 milligrams per normal cubic meter (dry, corrected to 15% O2) during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004) in Emission Unit U-00004) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PARTICULATES

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O2)

Reference Test Method: 40 CFR 60 Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 136: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 136.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 007 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 136.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O2) during distillate oil firing at maximum load operation (Process 007) in the gas turbine (Emission Source GT004) in

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NOx and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH3 emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD
Parameter Monitored: AMMONIA
Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O2)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 137: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (e) (2) (ii)

Item 137.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

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

Item 137.2:
Compliance Certification shall include the following monitoring:

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

Oxides of nitrogen emissions from the combustion gas turbines (Emission Source GT004) burning distillate oil will comply with the limit of 65.0 ppmvd in accordance with 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitor (CEMS) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

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

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 138: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 138.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 008

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 138.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A Method 18/25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE



Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 139: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 139.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

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

Item 139.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NOx emission limit is 6.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NOx emission at the gas turbine exhaust stack. LAER is required. Compliance with the NOx emission will be determined with the use of CEMS. The reference test method for NOx is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 140: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 140.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

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

Item 140.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-9: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-9.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-9.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 0.00161 pounds per million Btu heat input during distillate oil firing at 70 % load operation (Process 008) in the gas turbine (Emission Source GT004). The emission rate on a per million Btu basis for Emission Unit U-00004 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight), or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine

GT004 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO

catalyst = 0.190956 lbs/hr of H₂SO₄

C = Emission factor of Sulfuric Acid due to the SCR

Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =

A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212 lbs/hr of Sulfuric Acid

(0.212 lbs/hr of Sulfuric Acid) / (131 MM Btus/hr) = 0.00161 pounds per million Btu

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.00161 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



Condition 1-10: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-10.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-10.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 0.148 pounds per hour during distillate oil firing at 70% load operation (Process 008) in the gas turbine (Emission Source GT004). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight) or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the combustion turbine, and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO catalyst = 0.190956 lbs/hr of H₂SO₄



C = Emission factor of Sulfuric Acid due to the SCR
Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine +
emissions from CO catalyst + emissions from SCR catalyst =
A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212
lbs/hr of Sulfuric Acid

Sulfuric Acid Emissions at 70% load = 0.212 lbs/hr x
0.70 = 0.148 lbs/hr of H₂SO₄

Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 0.148 pounds per hour
Reference Test Method: 40 CFR Appendix A, Method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 141: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 141.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004	Emission Point: 00004
Process: 008	Emission Source: GT004

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

Item 141.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

The Sulfur Dioxide emission limit is 0.3 parts per million by volume during distillate oil firing at minimum load operation (70 %) - Process 008 in the gas turbine (Emission source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Compliance with the Sulfur Dioxide emissions will be determined based on fuel firing rate and % sulfur analysis in the fuel oil (maximum of 15.0 ppm). BACT is required.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 15.0 parts per million by weight
Reference Test Method: 40 CFR 60.335 Method
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.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 144: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 144.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

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

Item 144.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 008 in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PM-10
Upper Permit Limit: 30.0 milligrams per normal cubic
meter (dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix A, Methods 201 A and 202
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 145: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



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

Item 145.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

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

Item 145.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 008 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 146: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 146.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 008 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 146.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 008 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 147: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (e) (2) (i)

Item 147.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004
Process: 009

Emission Point: 00004
Emission Source: GT004

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

Item 147.2:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

This condition is for the Siemens Model 400-GT combustion turbine (Emission Source GT004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100 %). Compliance with the NOx standard of 42.0 ppmvd for combustion turbines burning natural gas will be met based on the combustion turbines emission guarantee of 2.5 ppmvd on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combustion gas turbine outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 42.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: EPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 148: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 148.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 009

Emission Source: GT004

Regulated Contaminant(s):

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

Item 148.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NOx standard of 42 parts per million by volume (dry, corrected to 15% O2) for the Siemens Model 400-GT combustion turbine (Emission Source GT004) with maximum heat input rating of 139.6 MM Btu/hr @ 100 % load (Process 009) will be met based on the combustion turbine emission guarantee of 2.5 parts per million by volume

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



(dry, corrected to 15% O₂) on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combustion gas turbine (Emission Source GT004) outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.5 parts per million by volume

(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 149: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 149.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 009

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 149.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 2.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load operation in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Manufacturer Name/Model Number: TBD

Parameter Monitored: VOC

Upper Permit Limit: 2.0 parts per million by volume

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR 60 Appendix A, Method 18/25A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 150: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 150.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 009 Emission Source: GT004

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

Item 150.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NO_x emission limit is 2.5 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load operation in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NO_x emission at the gas turbine exhaust stack. LAER is required. Compliance with the NO_x emission will be determined with the use of CEMS. The reference test method for NO_x is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 151: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 151.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 009

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 000630-08-0

CARBON MONOXIDE

Item 151.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 1.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load operation in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 1.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-11: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-11.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 009

Emission Source: GT004

Regulated Contaminant(s):



CAS No: 007664-93-9 SULFURIC ACID

Item 1-11.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 8.30 pounds per hour during natural gas firing at maximum load operation (Process 009) in the gas turbine (Emission Source GT004). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

E = Emission factor of Sulfuric Acid due to Gas Turbine
GT004 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst
= E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 8.30 pounds per hour

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-12: Compliance Certification



Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-12.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 009 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-12.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 8.30 pounds per hour during natural gas firing at maximum load operation (Process 009) in the gas turbine (Emission Source GT004). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Sulfur emissions is 942 lbs/hr (assuming all sulfur combusted)

E = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of



Sulfuric Acid

Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 8.30 pounds per hour
Reference Test Method: 40 CFR 60 Appendix A, Method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-13: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-13.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 009 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-13.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction. The Sulfuric Acid emission rate limit is 0.063 pounds per million Btu heat input during natural gas firing at maximum load operation (Process 009) in the gas turbine (Emission Source GT004). The emission rate on a per million Btu basis for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S/hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heating Value of natural gas = 950 Btu/scf



E = Emission factor of Sulfuric Acid due to Gas Turbine
GT004 = 0.60 bs/hr of H₂SO₄
F = Emission factor of Sulfuric Acid due to the CO
catalyst = 7.5 lbs/hr of H₂SO₄
G = Emission factor of Sulfuric Acid due to the SCR
Catalyst = 0.201 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine
+ emissions from CO catalyst + emissions from SCR catalyst
= E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of
Sulfuric Acid = 8.30 lbs/hr x (1 hr/131 MM Btu) = 0.063
lbs/MM Btu

Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 0.063 pounds per million Btus
Reference Test Method: 40 CFR Appendix A. Method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-14: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-14.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 009 Emission Source: GT004

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

Item 1-14.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

The Sulfur Dioxide emission limit is 0.060 pounds per million Btu during natural gas firing in the gas turbine [Processes 009 and P10], Emission Source GT004 in Emission Unit U-00004 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4. BACT is required.

The sulfur dioxide emission limit is a discrete one hour average based on definition of "natural gas" per §60.331

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



(u) and the maximum heat input rating of the U-00004 combustion gas turbine. Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and have a gross caloric value between 950 and 1100 Btu per standard cubic foot. The calculated upper limit of sulfur dioxide emissions, assuming 100% conversion of sulfur to sulfur dioxide, is 0.060 lb/MM Btu.

$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285$
lbs S per SCF gas

$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01$
E-08 lbs S/Btu

$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs}$
S/Million Btu

$(0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1$
lb Sulfur) = 0.060 lbs Sulfur Dioxide/million Btu

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 0.060 pounds per million Btus

Reference Test Method: 40 CFR 60.334 (h)

Monitoring Frequency: MONTHLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 154: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 154.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 009

Emission Source: GT004

Regulated Contaminant(s):

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

Item 154.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

The PM-10 emission limit is 7.5 milligrams per normal cubic meter (dry, corrected to 15% O2) during natural gas firing at maximum load operation (100%) - Process 009 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

The PM-10 emission limit is 10.0 milligrams per normal cubic meter (dry, corrected to 15% O2) during natural gas firing at maximum load operation (Process P10) in the gas turbine (Emission Source GT004) in Emission Unit U-00004) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PM-10

Upper Permit Limit: 7.5 milligrams per normal cubic meter (dry, corrected to 15% O2)

Reference Test Method: 40 CFR Appendix A, Methods 201A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 155: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 155.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004
Process: 009

Emission Point: 00004
Emission Source: GT004

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

Item 155.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 7.5 milligrams per normal cubic meter (dry, corrected to 15% O2) during natural gas firing at maximum load operation (100%) - Process 009 in the gas turbine (Emission Source GT004) in



Emission unit U-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

The Particulates emission limit is 10.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at maximum load operation (Process P10) in the gas turbine (Emission Source GT004) in Emission Unit U-00004) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PARTICULATES

Upper Permit Limit: 7.5 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 156: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 156.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 009

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 156.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load operation (100 %) - Process 009 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD
Parameter Monitored: AMMONIA
Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 158: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 158.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

Item 158.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NO_x standard for mid-size boilers burning natural gas will be met based on the duct burner (Emission Control GTC04) emission guarantee of 0.1 lb/MMBtu on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combined combustion gas turbine and duct burner outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.1 pounds per million Btus

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Reference Test Method: EPA Method 7E
Monitoring Frequency: CONTINUOUS
Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 159: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.6 (b)

Item 159.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

Item 159.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NOx standard for mid-size boilers burning natural gas will be met based on the duct burner (Emission Control GTC04) in Emission unit U-00004 emission guarantee of 0.1 lb/MM Btu on natural gas (Process 011). Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combined combustion gas turbine (Emission Source GT004) and duct burner (Emission Control GTC04) outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: EPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 1-15: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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



Item 1-15.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-15.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Sulfuric Acid emission limit is 0.065 lbs/MM Btu during natural gas firing in the duct burner [Process 011], Emission Control GTC04 in Emission Unit U-00004 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4. BACT is required.

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation), a catalyst section of ducting (SCR catalyst) for NOx emission reduction, and the to a duct burner (GTC04) for further NOx reduction. The Sulfuric Acid emission rate limit is 0.065 lbs/MM Btu during natural gas firing at maximum load operation in the gas turbine (Emission Source GT004) with a duct burner GTC04 (Process 011). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

Duct Burner rating = 53 MM Btu/hr

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Combined heat input = Gas Turbine rating + Duct Burner rating = 184 MM Btu/hr

E = Emission factor of Sulfuric Acid due to Gas Turbine
GT004 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

D = Emission factor of Sulfuric Acid due to the Duct Burner GTC04 = 3.66 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst + emissions from duct burner = E + F + G + D = 0.60 + 7.5 + 0.201 + 3.66 = 11.96 lbs/hr of Sulfuric Acid

Total Sulfuric Acid Emissions = 11.96 lbs/hr x $\left[\frac{1}{131 + 53}\right]$ MM Btu = 11.96 lbs/hr x $\left[\frac{1}{184}\right]$ MM Btu = 0.065 lbs/MM Btu

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.065 pounds per million Btus

Reference Test Method: 40 CFR 60.48c (g)(3)

Monitoring Frequency: MONTHLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 1-16: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-16.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 011

Emission Source: GTC04

Regulated Contaminant(s):

CAS No: 007664-93-9 SULFURIC ACID

Item 1-16.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:



Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation), a catalyst section of ducting (SCR catalyst) for NOx emission reduction, and the to a duct burner (GTC04) for further NOx reduction. The Sulfuric Acid emission rate limit is 11.96 lbs/hr during natural gas firing at maximum load operation in the gas turbine (Emission Source GT004) with a duct burner GTC04 (Process 011). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Duct burner rating = 53 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

Duct Burner emissions = 53 MM Btu/hr x 0.069 lbs/MM Btu of H2SO4 = 3.66 lb/hr H2SO4

Gas Turbine rating = 131 MM Btu/hr

E = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.60 bs/hr of H2SO4

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H2SO4

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H2SO4

D = Emission factor of Sulfuric Acid due to the Duct Burner GTC04 = 3.66 lbs/hr of H2SO4

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst + emissions from duct burner = E + F + G + D = 0.60 + 7.5 + 0.201 + 3.66 = 11.96 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 11.96 pounds per hour

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



Condition 160: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 160.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

Item 160.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 0.01 lb/MM Btu during natural gas firing of the Duct Burner (Emission Control GTC04) in Emission Unit U-00004 - Process 011 based on the higher heating value (HHV) of fuel. Compliance with the PM-10 emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for PM-10 is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PM-10

Upper Permit Limit: 0.01 pounds per million Btus

Reference Test Method: 40 CFR Appendix A, Methods 201A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 161: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 161.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

Item 161.2:



Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 0.01 lb/MM Btu during natural gas firing of the Duct Burner (Emission Control GTC04) in Emission Unit U-00004 - Process 011 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.01 pounds per million Btus

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 162: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 162.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 011

Emission Source: GTC04

Regulated Contaminant(s):

CAS No: 007664-41-7

AMMONIA

Item 162.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing of the Duct Burner (Emission Control GTC04) in Emission Unit U-00004 - Process 011 based on the higher heating value (HHV) of fuel.. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD
Parameter Monitored: AMMONIA
Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 1-17: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-17.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

Item 1-17.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The Sulfur Dioxide emission limit is 0.060 pounds per million Btu during natural gas firing in the duct burner [Process 011], Emission Control GTC04 in Emission Unit U-00004 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4.

The sulfur dioxide emission limit is a discrete one hour average based on definition of "natural gas" per §60.331 (u) and the maximum heat input rating of the U-00004

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



combustion gas turbine. Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and have a gross caloric value between 950 and 1100 Btu per standard cubic foot. The calculated upper limit of sulfur dioxide emissions, assuming 100% conversion of sulfur to sulfur dioxide, is 0.060 lbs/MM Btus.

$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$

$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$

$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$

$(0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.06 \text{ lbs Sulfur Dioxide/million Btu}$

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR DIOXIDE
Upper Permit Limit: 0.060 pounds per million Btus
Reference Test Method: 40 CFR 60.48c (g)(3)
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2012.
Subsequent reports are due every 6 calendar month(s).

Condition 1-18: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.47c(c), NSPS Subpart Dc

Item 1-18.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

Item 1-18.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Compliance with Particulate Matter emission limits for the duct burner (Emission Control GTC04) will be by maintaining records of the natural gas sulfur content (20 grains per 100 dscf of natural gas or less) in accordance with 40 CFR 60.47c(c).

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$\text{Sulfur Dioxide emission limit} = (0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.06 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.03 pounds per million Btus
Reference Test Method: 40 CFR 60.334(h)
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2012.
Subsequent reports are due every 6 calendar month(s).

Condition 1-19: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-19.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: 011 Emission Source: GTC04

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

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

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:



Compliance with Particulate Matter emission limits for the duct burner (Emission Control GTC06) will be by maintaining records of the natural gas consumption.

$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285$
lbs S per SCF gas

$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01$
E-08 lbs S/Btu

$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs}$
S/Million Btu

Sulfur Dioxide emission limit = $(0.0301 \text{ lbs S/Million Btu})$
 $\times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.060 \text{ lbs}$
Sulfur Dioxide/million Btu

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 20 grains per 100 dscf
Reference Test Method: 40 CFR 60.334(h)
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2012.
Subsequent reports are due every 6 calendar month(s).

Condition 165: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (e) (2) (i)

Item 165.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: P10 Emission Source: GT004

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

Item 165.2:

Compliance Certification shall include the following monitoring:

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

NOx emissions from the Siemens Model 400-GT combustion turbine (Emission Source GT004) with maximum heat input rating of 110.6 MM Btu/hr burning natural gas at 70 % load

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



are limited by 6 NYCRR 227-2.4(e)(2)(i) for combustion turbines burning natural gas to 42.0 ppmvd @ 15% O₂. Compliance will be met based on the combustion turbine emission guarantee of 3.5 ppmvd at minimum load (70 %) on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combustion gas turbine outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 42.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: EPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 166: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 166.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: P10

Emission Source: GT004

Regulated Contaminant(s):

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

Item 166.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NO_x standard of 42 parts per million by volume (dry, corrected to 15% O₂) on natural gas for the Siemens Model 400-GT combustion turbine (Emission Source GT004) with maximum heat input rating of 110.6 MM Btu/hr at 70 % load (Process P10) will be met based on the combustion turbine emission guarantee of 3.5 parts per million by volume (dry, corrected to 15% O₂) on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combustion gas turbine (Emission Source GT004) outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: EPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 167: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 167.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: P10

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 167.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Manufacturer Name/Model Number: TBD

Parameter Monitored: VOC

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A, Method 18/25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Condition 168: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 168.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: P10 Emission Source: GT004

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

Item 168.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NOx emission limit is 3.5 parts per million by volume (dry, corrected to 15% O2) during natural gas firing at minimum load operation (70 %) in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NOx emission at the gas turbine exhaust stack. LAER is required. Compliance with the NOx emission will be determined with the use of CEMS. The reference test method for NOx is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 169: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 169.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



Process: P10 Emission Source: GT004

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

Item 169.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) in the gas turbine (Emission Source GT004) based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-20: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-20.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: P10 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-20.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING



Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 5.81 pounds per hour during natural gas firing at 70% of the maximum load operation (Process P10) in the gas turbine (Emission Source GT004). The hourly mass emission rate for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, 70% of the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

E = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst
= E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of Sulfuric Acid

Emissions at 70% load (Process P10) = 8.30 lbs/hr of Sulfuric Acid x 0.70 = 5.81 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 5.81 pounds per hour

Reference Test Method: 40 CFR Appendix A, method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-21: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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



Item 1-21.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: P10 Emission Source: GT004

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-21.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00004 is a gas turbine (GT004) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction. The Sulfuric Acid emission rate limit is 0.063 pounds per million Btu heat input during natural gas firing at 70% of the maximum load operation (Process P10) in the gas turbine (Emission Source GT004). The emission rate on a per million Btu basis for Emission Unit U-00004 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine. BACT is required.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heating Value of the natural gas = 950 Btu/scf

E = Emission factor of Sulfuric Acid due to Gas Turbine
GT004 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO
catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR
Catalyst = 0.201 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine
+ emissions from CO catalyst + emissions from SCR catalyst
= E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of
Sulfuric Acid = 8.30 lbs/hr x (1 hr/131 MM Btu) = 0.063

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



lbs/MM Btu

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.063 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 172: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 172.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: P10

Emission Source: GT004

Regulated Contaminant(s):

CAS No: ONY075-00-5 PM-10

Item 172.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process P10 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PM-10

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Methods 201A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 173: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013



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

Item 173.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: P10 Emission Source: GT004

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

Item 173.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process P10 in the gas turbine (Emission Source GT004) in Emission unit u-00004 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 174: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 174.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004
Process: P10 Emission Source: GT004

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

Item 174.2:

Compliance Certification shall include the following monitoring:



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

Monitoring Description:

The Sulfur Dioxide emission limit is 0.0006 pounds per million BTUs during natural gas firing at minimum load operation (70 %) - Process P10 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Compliance with the Sulfur Dioxide emission limit will be determined based on fuel firing rate and Sulfur Dioxide emission factor (0.0006 lbs/MM Btu). BACT is required.

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 0.0006 pounds per million Btus

Reference Test Method: 40 CFR GG.335 Method

Monitoring Frequency: MONTHLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 175: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 175.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: P10

Emission Source: GT004

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 175.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process P10 in the gas turbine (Emission Source GT004) in Emission Unit U-00004 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD
Parameter Monitored: AMMONIA
Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 176: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 211.3

Item 176.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 176.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)
Monitoring Description:
Compliance will be demonstrated with a Continuous Opacity Monitor (COMS) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: COMS - Durag Model 290
Parameter Monitored: OPACITY
Upper Permit Limit: 57 percent
Reference Test Method: 40 CFR 60 Appendix A, Method 9

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 177: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 225-1.7

Item 177.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 177.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Riverbay Co-Op City will use distillate fuel oil with a sulfur limit of 15.0 ppm by weight. The sulfur content will be certified by the fuel oil supplier with each delivery to the bulk storage tank, in accordance with 40 CFR 75, Appendix D, Section 2.2.1.2 and 40 CFR 60, section 334 (i)(1). A SO2 monitor will not be required.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 178: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 178.1:



The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 178.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

No owner or operator of a combustion installation shall emit greater than 20 percent opacity for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

Manufacturer Name/Model Number: COMS - Durag Model DR-290

Parameter Monitored: OPACITY

Upper Permit Limit: 27 percent

Reference Test Method: 40 CFR 60 Appendix A , Method 9

Monitoring Frequency: CONTINUOUS

Averaging Method: ONE CONTINUOUS 6-MINUTE PERIOD PER HOUR

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 179: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 179.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

Item 179.2:

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 combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average utilizing a continuous opacity monitor (COM).

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 180: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 180.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 180.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the opacity limit is demonstrated with a
Continuous Opacity Monitor System (COMS) in accordance with
40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: COMS - Durag Model DR-290

Parameter Monitored: OPACITY

Upper Permit Limit: 27 percent

Reference Test Method: 40 CFR 60 Appendix A, Method 9

Monitoring Frequency: CONTINUOUS

Averaging Method: ONE CONTINUOUS 6-MINUTE PERIOD PER
HOUR

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 181: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 181.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 181.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the opacity limit is demonstrated with a Continuous Opacity Monitor System (COMS) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: COMS - Durag Model DR-290

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 Appendix A, Method 9

Monitoring Frequency: CONTINUOUS

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 7/30/2008.

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

Condition 182: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 182.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 182.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbine (Emission Source GT006) in emission Unit U-00006 burning distillate oil will comply with 6 NYCRR 227-2.4(e) limit of 65.0 ppmvd @ 15% O₂ for combustion turbines. Compliance is demonstrated with a Continuous Emission Monitor (CEMs) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 65.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR 60 Appendix A, Method 7E
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 183: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 183.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 183.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbine (Emission Source GT006) in Emission Unit U-00006 burning natural gas will comply with the limit of 42.0 ppmvd @ 15% O₂ in accordance with 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMs) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 42.0 parts per million by volume
(dry, corrected to 15% O₂)

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 184: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



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

Item 184.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 184.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Oxides of Nitrogen emissions in pounds per hour during start-up and shut-down on natural gas, in order to establish an emission limit in pounds per hour for the combustion turbine operations (Emission Source GT006) in Emission Unit U-00006. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 185: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 185.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 185.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Oxides of Nitrogen emissions in pounds per hour during start-up and shut-down

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



on distillate fuel oil, in order to establish an emission limit in pounds per hour for the combustion turbine operations (Emission Source GT006) in Emission Unit U-00006. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 186: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 186.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Regulated Contaminant(s):

CAS No: 000630-08-0

CARBON MONOXIDE

Item 186.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Carbon Monoxide emissions in pounds per hour during start-up and shut-down on natural gas, in order to establish an emission limit in pounds per hour for the combustion turbine operations (Emission Source GT006) in Emission Unit U-00006. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 187: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



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

Item 187.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 187.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Carbon Monoxide emissions in pounds per hour during start-up and shut-down on distillate oil, in order to establish an emission limit in pounds per hour for the combustion turbine operations (Emission Source GT006) in Emission Unit U-00006. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-22: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-22.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 1-22.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:



The Sulfur Dioxide emission limit is 0.060 pounds per million Btu during natural gas firing in the gas turbine [Processes 014 and 015], Emission Source GT006 in Emission Unit U-00006 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4.

The sulfur dioxide emission limit is a discrete one hour average based on definition of "natural gas" per §60.331 (u) and the maximum heat input rating of the U-00006 combustion gas turbine. Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and have a gross caloric value between 950 and 1100 Btu per standard cubic foot. The calculated upper limit of sulfur dioxide emissions, assuming 100% conversion of sulfur to sulfur dioxide, is 0.060 lb/MM Btu.

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$(0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.060 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 0.060 pounds per million Btus

Reference Test Method: 40 CFR 60.334(h)

Monitoring Frequency: SINGLE OCCURRENCE

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 189: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 189.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Emission Unit: U-00006

Emission Point: 00006

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 189.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The sulfur dioxide emission limit is a discrete one hour average based on the continuous recording of distillate oil usage, with heat input corresponding to the higher heating value of the fuel. Compliance will be determined by fuel oil sulfur certification of less than 15.0 ppm Sulfur provided by supplier with each delivery. Facility gas turbine (Emission Source GT004 & GT006) fuel oil operation is limited to 3,460 total hours/year.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 190: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 190.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 190.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

Riverbay Co-Op City will use distillate oil with a sulfur limit of 15.0 ppm by weight to be certified by the distillate fuel oil supplier for each delivery to the bulk storage tank, in accordance with 40 CFR 75, Appendix D, Section 2.2.1.2 and 40 CFR Part 60, 334 (i)(1).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 191: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 191.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Regulated Contaminant(s):

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

Item 191.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NOx CEMS is used to demonstrate compliance with 40 CFR 60, Subpart GG, section 332 (a)(1) in accordance with the certification requirements of 40 CFR 60.334 (b), including Appendices B and F, and 40 CFR 75. The NOx emissions limit is 6.0 parts per million by volume (dry, corrected to 15% O2).

Riverbay Co-Op City will employ a NOx CEM as an alternative for monitoring and reporting excess emissions.

The CEMS QA/QC Plan's Supporting Document SD-7 was submitted with the Title V renewal application.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 192: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 192.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 192.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Riverbay Co-Op City will employ a NO_x CEM as an alternative for monitoring and reporting excess emissions.
The CEMS QA/QC Plan's Supporting Document SD-7 was submitted with the Title V renewal application.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 193: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 193.1:

The Compliance Certification activity will be performed for:



Emission Unit: U-00006 Emission Point: 00006

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

Item 193.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NO_x CEMS is used to demonstrate compliance with NO_x emission limits of 75.0 ppmvd @ 15% O₂ burning natural gas under Subpart GG in accordance with the certification requirements of 40 CFR 60 and 40 CFR 75. The permit emission limit is 3.5 ppmvd @ 15% O₂ under normal operating conditions firing natural gas at 70 % load (Process 015).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 194: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 194.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 194.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NO_x CEMS is used to demonstrate compliance with NO_x emission limits of 75.0 ppmvd @ 15% O₂ burning natural gas under Subpart GG in accordance with the certification

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



requirements of 40 CFR 60 and 40 CFR 75. The permit emission limit is 2.5 ppmvd @ 15% O₂ under normal operating conditions firing natural gas at 100% load (Process 014).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 2.5 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 195: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 195.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 195.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

A NO_x CEMS is used to demonstrate compliance with NO_x emission limits of 75.0 ppmvd @ 15% O₂ burning distillate oil under Subpart GG in accordance with the certification requirements of 40 CFR 60 and 40 CFR 75. The permit emission limit is 6.0 ppmvd @ 15% O₂ under normal operating conditions firing distillate fuel oil from 70% to 100% load.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 1-23: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-23.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 1-23.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

The natural gas combusted at the facility meets definition of "natural gas" per §60.331 (u). Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and a gross caloric value between 950 and 1100 Btu per standard cubic foot. As a result, sulfur dioxide emissions will be calculated using 0.060 lb/MMBtu, in accordance with 40 CFR 75, appendix D, Section 2.3.1.1. Riverbay Co-Op will monitor the monthly sulfur content data from Consolidated Edison.

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$\text{Sulfur Dioxide emission limit} = (0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.060 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 20 grains per 100 dscf
Reference Test Method: 40 CFR 60.334(h)
Monitoring Frequency: MONTHLY

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 197: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 197.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 197.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

Riverbay Co-Op City is proposing a distillate fuel oil sulfur limit of 15.0 ppm by weight to be certified by the fuel supplier with each delivery, in accordance with 40 CFR Part 75, Appendix D, Section 2.2.1.2 and 40 CFR Part 60, 334(i)(1).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 198: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2) (ii)

Item 198.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



Emission Unit: U-00006 Emission Point: 00006
Process: 012 Emission Source: GT006

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

Item 198.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbines (Emission Source GT006) burning distillate oil will comply with the limit of 65.0 ppmvd in accordance with 6 NYCrr 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMS) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

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

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 199: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 199.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 012 Emission Source: GT006

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 199.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 5.0 parts per million by volume

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



(dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Parameter Monitored: VOC

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A Method 18/25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 200: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 200.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 012

Emission Point: 00006
Emission Source: GT006

Regulated Contaminant(s):

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

Item 200.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NO_x emission limit is 6.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NO_x emission at the gas turbine exhaust stack. LAER is required. Compliance with the NO_x emission will be determined with the use of CEMS. The reference test method for NO_x is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 201: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 201.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 012

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 201.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.



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

Condition 1-24: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-24.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 012 Emission Source: GT006

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 0.212 pounds per hour during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006). The hourly mass emission rate for Emission Unit U-00006 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight) or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the combustion turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine GT006 = 0.015462 lbs/hr of H2SO4

B = Emission factor of Sulfuric Acid due to the CO

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



catalyst = 0.190956 lbs/hr of H₂SO₄
C = Emission factor of Sulfuric Acid due to the SCR
Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine +
emissions from CO catalyst + emissions from SCR catalyst =
A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212
lbs/hr of Sulfuric Acid

Upper Permit Limit: 0.212 pounds per hour
Reference Test Method: 40 CFR 60 Appendix A, Method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-25: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-25.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 012 Emission Source: GT006

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction. The Sulfuric Acid emission rate limit is 0.00161 pounds per million Btu heat input during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006). The emission rate on a per million Btu basis for Emission Unit U-00004 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight), or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the combustion turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be



determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine
GT006 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO catalyst = 0.190956 lbs/hr of H₂SO₄

C = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212 lbs/hr of Sulfuric Acid

(0.212 lbs/hr of Sulfuric Acid) / (131 MM Btus/hr) =
0.00161 pounds per million Btu

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.00161 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 203: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 203.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 012

Emission Point: 00006
Emission Source: GT006

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

Item 203.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

The Sulfur Dioxide emission limit is 0.3 parts per million by volume (dry, corrected to 15% O₂) or 0.19 lb/hr during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Compliance with the Sulfur Dioxide emissions limit will be determined based on fuel firing rate and % sulfur analysis in the fuel oil (maximum 15.0 ppm sulfur). BACT is required.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

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.

The initial report is due 7/30/2008.

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

Condition 205: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 205.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 012

Emission Source: GT006

Regulated Contaminant(s):

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

Item 205.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit of 15.0 milligrams per cubic meter for distillate oil firing at maximum load (Process 012) is a discrete one hour average based on the heat input corresponding to the higher heating value of the fuel. Compliance with the PM-10 emission will be determined with a one time stack test within 6 months of

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



initial operation of the combustion turbine (Emission Source GT006) on distillate oil in Emission Unit U-00006. The reference test method for PM-10 is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

The PM-10 emission limit is 25.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PM-10

Upper Permit Limit: 15.0 milligrams per cubic meter

Reference Test Method: 40 CFR 60 Appendix A, Methods 201A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 206: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 206.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 012

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 206.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



The Particulates emission limit is 25.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PARTICULATES

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 207: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 207.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 012

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 207.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at maximum load operation (Process 012) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD
Parameter Monitored: AMMONIA
Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix B and F
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 208: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (e) (2) (ii)

Item 208.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

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

Item 208.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of nitrogen emissions from the combustion gas turbines (Emission Source GT006) in Emission Unit U-00006 burning distillate oil will comply with the limit of 65.0 ppmvd in accordance with 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMS) in accordance with 40 CFR Part 60 Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

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

Reference Test Method: 40 CFR 60 Appendix A, Method 7

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Condition 209: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 209.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

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

Item 209.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Oxides of Nitrogen emissions in pounds per hour during start-up and shut-down on distillate fuel oil, in order to establish an emissions limit in pounds per hour for the combustion turbine (Emission Source GT006) operations in Emission Unit U-00006. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 210: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 210.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

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

Item 210.2:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Records will be maintained of Carbon Monoxide emissions in pounds per hour during start-up and shut-down on distillate fuel oil, in order to establish an emissions limit in pounds per hour for the combustion turbine (Emission Source GT006) operations in Emission Unit U-00006. A CEMS is used to monitor emissions at the gas turbine exhaust stack. The emission limit will apply during start-up and shut-down below 70 % load.

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 211: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 211.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 013

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 211.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel.

Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: VOC

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A Method 18/25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 212: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 212.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 013

Emission Source: GT006

Regulated Contaminant(s):

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

Item 212.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NO_x emission limit is 6.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NO_x emission at the gas turbine exhaust stack. LAER is required.

Compliance with the NO_x emission will be determined with the use of CEMS. The reference test method for NO_x is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 213: Compliance Certification



Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 213.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

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

Item 213.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-26: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-26.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006



Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 0.00161 pounds per million Btu heat input during distillate oil firing at 70% load operation (Process 013) in the gas turbine (Emission Source GT006). The emission rate on a per million Btu basis for Emission Unit U-00006 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight), or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine GT006 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO catalyst = 0.190956 lbs/hr of H₂SO₄

C = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212 lbs/hr of Sulfuric Acid

(0.212 lbs/hr of Sulfuric Acid) / (131 MM Btus/hr) =
0.00161 pounds per million Btu

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.00161 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-27: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-27.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 013

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

Item 1-27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 0.148 pounds per hour during distillate oil firing at 70% load operation (Process 013) in the gas turbine (Emission Source GT006). The hourly mass emission rate for Emission Unit U-00006 is based on the maximum sulfur content of the distillate oil (15 parts per million by weight) or 0.000015 lbs S per lb of fuel oil, the maximum heat input rating of the combustion turbine, and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Distillate fuel oil consumption = 942 gal/hr at 100% load

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Gas Turbine rating = 131 MM Btu/hr, Sulfur emission rate is 0.100976 lbs/hr (assuming all sulfur combusted)

A = Emission factor of Sulfuric Acid due to Gas Turbine

GT004 = 0.015462 lbs/hr of H₂SO₄

B = Emission factor of Sulfuric Acid due to the CO

catalyst = 0.190956 lbs/hr of H₂SO₄

C = Emission factor of Sulfuric Acid due to the SCR

Catalyst = 0.0051 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =

A + B + C = 0.015462 + 0.190956 + 0.0051 = 0.212 lbs/hr of Sulfuric Acid

Sulfuric Acid Emissions at 70% load = 0.212 lbs/hr x 0.70 = 0.148 lbs/hr of H₂SO₄

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.148 pounds per hour

Reference Test Method: 40 CFR Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 214: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 214.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 013

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 214.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The Sulfur Dioxide emission limit is 0.3 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. This emission limit applies at all times,

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Compliance with the Sulfur Dioxide emission will be determined based on fuel firing rate and % sulfur analysis in the fuel oil (maximum 15.0 ppm sulfur). The reference test method is as per 40 CFR 60.335. BACT is required.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15.0 parts per million by weight

Reference Test Method: 40 CFR 60.335 Method

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.

The initial report is due 7/30/2008.

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

Condition 217: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 217.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 013

Emission Source: GT006

Regulated Contaminant(s):

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

Item 217.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.



Parameter Monitored: PM-10
Upper Permit Limit: 30.0 milligrams per normal cubic
meter (dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix A, Methods 201A and 202
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 218: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 218.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

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

Item 218.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 30.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on distillate oil. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 30.0 milligrams per normal cubic
meter (dry, corrected to 15% O₂)
Reference Test Method: 40 CFR Appendix A, Method 5
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 219: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013



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

Item 219.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 013 Emission Source: GT006

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 219.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during distillate oil firing at minimum load operation (70 %) - Process 013 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 220: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.4 (e) (2) (i)



Item 220.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

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

Item 220.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of Nitrogen emissions from the combustion gas turbines (Emission Source GT006) in Emission Unit U-00006 burning natural gas will comply with the 42.0 ppmvd @15% O2 limit in 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMs) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 42.0 parts per million by volume
(dry, corrected to 15% O2)

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

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 221: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement:6 NYCRR 227-2.6 (b)

Item 221.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

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

Item 221.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NO_x standard of 42 parts per million by volume (dry, corrected to 15% O₂) on natural gas for the Siemens Model 400-GT combustion turbine (Emission Source GT006) with maximum heat input rating of 139.6 MM Btu/hr at 100 % load (Process 014) will be met based on the combustion turbine emission guarantee of 2.5 parts per million by volume (dry, corrected to 15% O₂) on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combustion gas turbine (Emission Source GT006) outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

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

Condition 222: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 222.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006	Emission Point: 00006
Process: 014	Emission Source: GT006

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 222.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 2.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on natural gas.



The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Manufacturer Name/Model Number: TBD
Parameter Monitored: VOC
Upper Permit Limit: 2.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR 60 Appendix A, Method 18/25A
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 223: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 223.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

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

Item 223.2:

Compliance Certification shall include the following monitoring:

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

The NO_x emission limit is 2.5 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NO_x emission at the gas turbine exhaust stack. LAER is required. Compliance with the NO_x emission will be determined with the use of CEMS. The reference test method for NO_x is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 2.5 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR 60 Appendix B and F
Monitoring Frequency: CONTINUOUS

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Averaging Method: 3-HOUR BLOCK AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 224: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 224.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

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

Item 224.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 1.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit u-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required. Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 1.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-28: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013



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

Item 1-28.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

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

Item 1-28.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The Sulfur Dioxide emission limit is 0.060 pounds per million Btu during natural gas firing in the gas turbine [Processes 014 and 015], Emission Source GT006 in Emission Unit U-00006 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4.

The sulfur dioxide emission limit is a discrete one hour average based on definition of "natural gas" per §60.331 (u) and the maximum heat input rating of the U-00006 combustion gas turbine. Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and have a gross caloric value between 950 and 1100 Btu per standard cubic foot. The calculated upper limit of sulfur dioxide emissions, assuming 100% conversion of sulfur to sulfur dioxide, is 0.060 lb/MM Btu.

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$(0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.060 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NATURAL GAS
Parameter Monitored: SULFUR DIOXIDE

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Upper Permit Limit: 0.060 pounds per million Btus
Reference Test Method: 40 CFR 60.334 (h)
Monitoring Frequency: MONTHLY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2012.
Subsequent reports are due every 6 calendar month(s).

Condition 1-29: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-29.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction and the to a duct burner (GTC06) for further NO_x reduction. The Sulfuric Acid emission rate limit is 0.063 pounds per million Btu heat input during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) with a duct burner GTC04 (Process 016). The emission rate on a per million Btu basis for Emission Unit U-00006 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

E = Emission factor of Sulfuric Acid due to Gas Turbine

GT006 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst + emissions from duct burner = E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of Sulfuric Acid

Total Sulfuric Acid Emissions = 8.30 lbs/hr x (1 hr/(131) MM Btu = 0.063 lbs/MM Btu

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.063 pounds per million Btus

Reference Test Method: 40 CFR Appendix A. Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-30: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-30.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 014

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

Item 1-30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction. The Sulfuric Acid emission rate limit is 8.30 pounds per hour during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission



Source GT006). The hourly mass emission rate for Emission Unit U-00006 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu//scf

E = Emission factor of Sulfuric Acid due to Gas Turbine
GT006 = 0.60 bs/hr of H₂SO₄
F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄
G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 8.30 pounds per hour
Reference Test Method: 40 CFR 60 Appendix A, Method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 228: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 228.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 014 Emission Source: GT006

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

Item 228.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 7.5 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit U-00006) based on the higher heating value (HHV) of fuel.

Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201 A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

The PM-10 emission limit is 10.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit U-00006) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PM-10

Upper Permit Limit: 7.5 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Methods 201 A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 229: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 229.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 014

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 229.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 7.5 milligrams per normal cubic meter (dry, corrected to 15% O₂) during

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

The Particulates emission limit is 10.0 milligrams per normal cubic meter (dry, corrected to 15% O2) during natural gas firing at maximum load operation (Process 014) in the gas turbine (Emission Source GT006) in Emission Unit U-00006) prior to approved stack test (based on vendor's guarantee).

Parameter Monitored: PARTICULATES

Upper Permit Limit: 7.5 milligrams per normal cubic meter (dry, corrected to 15% O2)

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 230: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 230.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 014

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 230.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O2) during natural gas firing at maximum load operation (100 %) - Process 014 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Ammonia feed will be based on the NOx and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH3 emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 231: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.4 (e) (2) (i)

Item 231.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 015

Emission Source: GT006

Regulated Contaminant(s):

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

Item 231.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Oxides of Nitrogen emissions from the combustion gas turbines (Emission Source GT006) in Emission Unit U-00006 burning natural gas will comply with the 42.0 ppmvd @15% O2 limit in 6 NYCRR 227-2.4(e) for combustion turbines. Compliance is demonstrated with a Continuous Emissions Monitor (CEMs) in accordance with 40 CFR Part 60, Appendix A.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 42.0 parts per million by volume
(dry, corrected to 15% O₂)
Reference Test Method: 40 CFR 60 Appendix A, Method 7E
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 232: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 232.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 015 Emission Source: GT006

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

Item 232.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NO_x standard of 42 parts per million by volume (dry, corrected to 15% O₂) for the Siemens Model 400-GT combustion turbine (Emission Source GT004) with maximum heat input rating of 110.6 MM Btu/hr at 70 % load (Process 015) will be met based on the combustion turbine emission guarantee of 3.5 parts per million by volume (dry, corrected to 15% O₂) on natural gas. Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combustion gas turbine (Emission Source GT004) outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: EPA Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 24-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2008.

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Condition 233: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 233.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 015 Emission Source: GT006

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 233.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The VOC emission limit is 5.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process 015 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the VOC emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for VOC is 40 CFR Part 60, Appendix A, Method 18 (for methane) and Method 25A (for total hydrocarbon). The averaging method is for the reference test method is 1-hour average. LAER is required.

Manufacturer Name/Model Number: TBD

Parameter Monitored: VOC

Upper Permit Limit: 5.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix A, Method 18/25A

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 234: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 234.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



Process: 015

Emission Source: GT006

Regulated Contaminant(s):

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

Item 234.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The NOx emission limit is 3.5 parts per million by volume (dry, corrected to 15% O2) during natural gas firing at minimum load operation (70 %) - Process 015 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the high heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor NOx emission at the gas turbine (Emission Source GT006) exhaust stack. LAER is required. Compliance with the NOx emission will be determined with the use of CEMS. The reference test method for NOx is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 3-hour block average.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-HOUR BLOCK AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 235: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 235.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 015

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 235.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The CO emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process 015 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp - Co-Op City will use CEMS to monitor CO emission at the gas turbine exhaust stack. LAER is required.

Compliance with the CO emission will be determined with the use of CEMS. The reference test method for CO is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: CEMS - Thermo Environmental Model 48i

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR 60 Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-31: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-31.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 015

Emission Source: GT006

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

Item 1-31.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NO_x emission reduction. The Sulfuric Acid emission rate limit is 5.81 pounds per hour during natural gas firing at 70% of the maximum load operation (Process 015) in the gas turbine



(Emission Source GT006). The hourly mass emission rate for Emission Unit U-00006 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, 70% of the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas is 950 Btu/scf

E = Emission factor of Sulfuric Acid due to Gas Turbine
GT006 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst =
E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of Sulfuric Acid

Emissions for at 70% load (Process P10) = 8.30 lbs/hr of Sulfuric Acid x 0.70 = 5.81 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 5.81 pounds per hour
Reference Test Method: 40 CFR Appendix A, method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-32: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-32.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 015

Emission Point: 00006
Emission Source: GT006

Regulated Contaminant(s):



CAS No: 007664-93-9 SULFURIC ACID

Item 1-32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation) and a catalyst section of ducting (SCR catalyst) for NOx emission reduction. The Sulfuric Acid emission rate limit is 0.063 pounds per million Btu heat input during natural gas firing at 70% of the maximum load operation (Process 015) in the gas turbine (Emission Source GT006). The emission rate on a per million Btu basis for Emission Unit U-00006 is based on the maximum sulfur content of the distillate oil (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stack testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

Combined heat input = Gas Turbine rating + Duct Burner rating = 131 + 53 = 184 MM Btu/hr

E = Emission factor of Sulfuric Acid due to Gas Turbine GT006 = 0.60 bs/hr of H₂SO₄
F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄
G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst
= E + F + G = 0.60 + 7.5 + 0.201 = 8.30 lbs/hr of Sulfuric Acid

Total Sulfuric Acid Emissions = 8.30 lbs/hr x (1 hr/131 MM Btu) = 0.063 lbs/MM Btu

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 0.063 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 239: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 239.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 015

Emission Source: GT006

Regulated Contaminant(s):

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

Item 239.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process 015 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Methods 201 A and 202. The averaging method is for the reference test method is as per 40 CFR GG.335 Method. BACT is required.

Parameter Monitored: PM-10

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Methods 201 A and 202

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 240: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Item 240.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 015

Emission Point: 00006
Emission Source: GT006

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

Item 240.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process 015 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 15.0 milligrams per normal cubic meter (dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 241: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 241.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 015

Emission Point: 00006
Emission Source: GT006

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 241.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing at minimum load operation (70 %) - Process 015 in the gas turbine (Emission Source GT006) in Emission Unit U-00006 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 242: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 242.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 016

Emission Source: GTC06

Regulated Contaminant(s):

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

Item 242.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Duct burner NOx emission are limited by 6 NYCRR 227-2.4(c) for mid-size boilers burning natural gas only to 0.10 lb/MMBtu. Compliance will be met based on the duct burner (Emission Control GTC06) in Emission Unit U-00006 emission guarantee of 0.1 lb/MMBtu on natural gas. Performance will be confirmed with a Continuous Emissions Monitor on the combined combustion gas turbine and duct burner outlet.

Manufacturer Name/Model Number: CEMS - California Analytical Model 650
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.1 pounds per million Btus
Reference Test Method: EPA Method 7E
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 243: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable Federal Requirement: 6 NYCRR 227-2.6 (b)

Item 243.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006	Emission Point: 00006
Process: 016	Emission Source: GTC06

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

Item 243.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Compliance with the NOx standard for mid-size boilers burning gas will be met based on the duct burner (Emission Control GTC06) in Emission Unit U-00006 emission guarantee of 0.1 lb/MMBtu on natural gas (Process 016). Performance will be confirmed with a Continuous Emissions Monitor (CEM) on the combined combustion gas turbine (Emission Source GT006) and duct burner (Emission Control GTC06) outlet in accordance with 6 NYCRR 227-2.6(a)(2) and (b).

Manufacturer Name/Model Number: CEMS - California Analytical Model 650
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.1 pounds per million Btus
Reference Test Method: 40 CFR 60 Appendix A, Method 7E



Monitoring Frequency: CONTINUOUS
Averaging Method: 24-HOUR AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2008.
Subsequent reports are due every 3 calendar month(s).

Condition 1-33: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-33.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 016 Emission Source: GTC06

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-33.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Sulfuric Acid emission limit is 11.96 pounds per hour during natural gas firing in the duct burner [Process 016], Emission Control GTC06 in Emission Unit U-00006 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4.

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation), a catalyst section of ducting (SCR catalyst) for NOx emission reduction, and the to a duct burner (GTC06) for further NOx reduction. The Sulfuric Acid emission rate limit is 11.96 pounds per hour during natural gas firing at maximum load operation in the gas turbine (Emission Source GT006) with a duct burner GTC06 (Process 016). The hourly mass emission rate for Emission Unit U-00006 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be



determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Duct burner rating = 53 MM Btu/hr

Duct Burner emissions (Process 014) = 53 MM Btu/hr x
0.069 lbs/MM Btu of H₂SO₄ = 3.66 lb/hr H₂SO₄

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural
gas = 950 Btu/scf

E = Emission factor of Sulfuric Acid due to Gas Turbine
GT006 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO
catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR
Catalyst = 0.201 lbs/hr of H₂SO₄

D = Emission factor of Sulfuric Acid due to the Duct
Burner GTC06 = 3.66 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine
+ emissions from CO catalyst + emissions from SCR catalyst
+ emissions from duct burner = E + F + G + D = 0.60 +
7.5 + 0.201 + 3.66 = 11.96 lbs/hr of Sulfuric Acid

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 11.96 pounds per hour

Reference Test Method: 40 CFR 60 Appendix A, Method 8

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 1-34: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-34.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 016

Emission Point: 00006
Emission Source: GTC06

Regulated Contaminant(s):



CAS No: 007664-93-9 SULFURIC ACID

Item 1-34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emission Unit U-00006 is a gas turbine (GT006) connected downstream to a catalyst section of ducting for carbon monoxide emission reduction (CO oxidation), a catalyst section of ducting (SCR catalyst) for NOx emission reduction, and the to a duct burner (GTC06) for further NOx reduction. The Sulfuric Acid emission rate limit is 0.065 lbs/MM Btu during natural gas firing at maximum load operation in the gas turbine (Emission Source GT006) with a duct burner GTC06 (Process 016). The hourly mass emission rate for Emission Unit U-00006 is based on the maximum sulfur content of the natural gas (20 grains per 100 SCF), or 3.940 lbs S /hr, the maximum heat input rating of the gas turbine and expected conversion of sulfur dioxide to sulfur trioxide in the combustion turbine and the CO and SCR catalysts downstream of the combustion turbine.

Compliance with the Sulfuric Acid emission rate will be determined with a onetime stack test within 6 months of initial operation when firing distillate oil. Stacking testing will be based upon an approved protocol by the Department.

Gas Turbine rating = 131 MM Btu/hr, Heat Value of natural gas = 950 Btu/scf

Duct Burner rating = 53 MM Btu/hr

Combined heat input = Gas Turbine rating + Duct Burner rating = 131 + 53 = 184 MM Btu/hr

E = Emission factor of Sulfuric Acid due to Gas Turbine GT004 = 0.60 bs/hr of H₂SO₄

F = Emission factor of Sulfuric Acid due to the CO catalyst = 7.5 lbs/hr of H₂SO₄

G = Emission factor of Sulfuric Acid due to the SCR Catalyst = 0.201 lbs/hr of H₂SO₄

D = Emission factor of Sulfuric Acid due to the Duct Burner GTC04 = 3.66 lbs/hr of H₂SO₄

Total Sulfuric Acid Emissions = emissions from gas turbine + emissions from CO catalyst + emissions from SCR catalyst + emissions from duct burner = E + F + G + D = 0.60 + 7.5 + 0.201 + 3.66 = 11.96 lbs/hr of Sulfuric Acid



Total Sulfuric Acid Emissions = 11.96 lbs/hr x $\left[\frac{1}{131 + 53}\right]$ MM Btu = 11.96 lbs/hr x $\left[\frac{1}{184}\right]$ MM Btu = 0.065 lbs/MM Btu

Parameter Monitored: SULFURIC ACID
Upper Permit Limit: 0.065 pounds per million Btus
Reference Test Method: 40 CFR 60 Appendix A, Method 8
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 244: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 244.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006
Process: 016 Emission Source: GTC06

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

Item 244.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The PM-10 emission limit is 0.01 lb/MM Btu during natural gas firing of the Duct Burner (Emission Control GTC06) in Emission Unit U-00006 - Process 016 based on the higher heating value (HHV) of fuel. Compliance with the PM-10 emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for PM-10 is 40 CFR Part 60, Appendix A, Methods 201A and 202. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PM-10
Upper Permit Limit: 0.01 pounds per million Btus
Reference Test Method: 40 CFR Appendix A, Methods 201A and 202
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 245: Compliance Certification
Effective between the dates of 02/26/2008 and 02/25/2013

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 245.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 016

Emission Point: 00006
Emission Source: GTC06

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

Item 245.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Particulates emission limit is 0.01 lb/MM Btu during natural gas firing of the Duct Burner (Emission Control GTC06) in Emission Unit U-00006 - Process 016 based on the higher heating value (HHV) of fuel. Compliance with the Particulates emission will be determined with a one time stack test within 6 months of initial operation on natural gas. The reference test method for Particulates is 40 CFR Part 60, Appendix A, Method 5. The averaging method is for the reference test method is 1-hour average. BACT is required.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.01 pounds per million Btus

Reference Test Method: 40 CFR Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 246: Compliance Certification

Effective between the dates of 02/26/2008 and 02/25/2013

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

Item 246.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006
Process: 016

Emission Point: 00006
Emission Source: GTC06

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 246.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Monitoring Description:

The Ammonia (SCR slip) emission limit is 10.0 parts per million by volume (dry, corrected to 15% O₂) during natural gas firing of the Duct Burner (Emission Control GTC06) in Emission Unit U-00006 - Process 016 based on the higher heating value (HHV) of fuel. Riverbay Corp Co-Op City will control Ammonia emission through proper operation and control of the selective catalytic reduction (SCR). Control of the Ammonia feed will be based on the NO_x and fuel flow. This emission limit applies at all times, including start-up/shutdown, equipment maintenance, malfunctions and upsets as per the requirements of 6 NYCRR 201-1.4. Riverbay Corp - Co-Op City will use CEMS to monitor NH₃ emission at the gas turbine exhaust stack. BACT is required. Compliance with the Ammonia (SCR slip) emission will be determined with the use of CEMS. The reference test method for Ammonia (SCR slip) is 40 CFR 60 Appendix B and F. The averaging method is for the reference test method is 1-hour average.

Manufacturer Name/Model Number: TBD

Parameter Monitored: AMMONIA

Upper Permit Limit: 10.0 parts per million by volume
(dry, corrected to 15% O₂)

Reference Test Method: 40 CFR Appendix B and F

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 1-35: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

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

Item 1-35.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 016

Emission Source: GTC06

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 1-35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



The Sulfur Dioxide emission limit is 0.060 pounds per million Btu during natural gas firing in the duct burner [Process 016], Emission Control GTC06 in Emission Unit U-00006 based on the higher heating value (HHV) of the fuel. This emission limit applies at all times, including start-up / shutdown, equipment maintenance, malfunctions and upsets per the requirements of 6 NYCRR 201-1.4.

The sulfur dioxide emission limit is a discrete one hour average based on definition of "natural gas" per §60.331 (u) and the maximum heat input rating of the U-00006 combustion gas turbine. Natural gas is defined to contain 20.0 grains or less of total sulfur per 100 standard cubic feet and have a gross caloric value between 950 and 1100 Btu per standard cubic foot. The calculated upper limit of sulfur dioxide emissions, assuming 100% conversion of sulfur to sulfur dioxide, is 0.060 lbs/MM Btus.

$$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285 \text{ lbs S per SCF gas}$$

$$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01 \text{ E-08 lbs S/Btu}$$

$$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs S/Million Btu}$$

$$\text{Sulfur Dioxide emission limit} = (0.0301 \text{ lbs S/Million Btu}) \times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.06 \text{ lbs Sulfur Dioxide/million Btu}$$

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 0.060 pounds per million Btus

Reference Test Method: 40 CFR 60.48c (g)(3)

Monitoring Frequency: MONTHLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 1-36: Compliance Certification

Effective between the dates of 12/22/2011 and 02/25/2013

Applicable Federal Requirement: 40CFR 60.47c(c), NSPS Subpart Dc

Item 1-36.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation
Permit ID: 2-6003-00038/00008 Facility DEC ID: 2600300038



Emission Unit: U-00006 Emission Point: 00006
Process: 016 Emission Source: GTC06

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

Item 1-36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Compliance with Particulate Matter emission limits for the duct burner (Emission Control GTC06) will be by maintaining records of the natural gas sulfur content (20 grains per 100 dscf of natural gas or less) in accordance with 40 CFR 60.47c(c).

$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285$
lbs S per SCF gas

$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01$
E-08 lbs S/Btu

$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs}$
S/Million Btu

Sulfur Dioxide emission limit = $(0.0301 \text{ lbs S/Million Btu})$
 $\times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.06 \text{ lbs Sulfur}$
Dioxide/million Btu

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.03 pounds per million Btus

Reference Test Method: 40 CFR 60.334(h)

Monitoring Frequency: MONTHLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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

Condition 1-37: Compliance Certification
Effective between the dates of 12/22/2011 and 02/25/2013

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



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

Item 1-37.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00006

Emission Point: 00006

Process: 016

Emission Source: GTC06

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Compliance with Particulate Matter emission limits for the duct burner (Emission Control GTC06) will be by maintaining records of the natural gas consumption.

$(20 \text{ grains S}/100 \text{ SCF gas}) / (7000 \text{ grains}/\text{lb}) = 0.0000285$
lbs S per SCF gas

$(0.0000285 \text{ lbs S per SCF gas}) / (950 \text{ Btu} / \text{SCF gas}) = 3.01$
E-08 lbs S/Btu

$(3.01 \text{ E-08 lbs S/Btu}) \times (1 \text{ million Btu}) = 0.0301 \text{ lbs}$
S/Million Btu

Sulfur Dioxide emission limit = $(0.0301 \text{ lbs S/Million Btu})$
 $\times (2 \text{ lbs Sulfur Dioxide} / 1 \text{ lb Sulfur}) = 0.06 \text{ lbs Sulfur}$
Dioxide/million Btu

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: NATURAL GAS

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 20 grains per 100 dscf

Reference Test Method: 40 CFR 60.334(h)

Monitoring Frequency: MONTHLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2012.

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



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

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

Item A: 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 249: Contaminant List
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable State Requirement:ECL 19-0301

Item 249.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

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



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

CAS No: 007664-41-7
Name: AMMONIA

CAS No: 007664-93-9
Name: SULFURIC ACID

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

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

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

CAS No: 0NY998-00-0
Name: VOC

Condition 1-38: Unavoidable noncompliance and violations
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable State Requirement:6 NYCRR 201-1.4

Item 1-38.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

Condition 1-39: Visible Emissions Limited
Effective between the dates of 12/22/2011 and 02/25/2013

Applicable State Requirement:6 NYCRR 211.2

Item 1-39.1:

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

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

Condition 252: Compliance Demonstration
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable State Requirement:6 NYCRR 227-1.2 (a) (2)

Item 252.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 252.2:

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Compliance with the particulate emissions from the gas turbines will be demonstrated to be less than 0.1 lb/MM Btu (as required by NY State SIP) with a stack compliance test in accordance with 40 CFR Part 60 EPA Method 5.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 253: Compliance Demonstration
Effective between the dates of 02/26/2008 and 02/25/2013

Applicable State Requirement: 6 NYCRR 227-1.2 (a) (2)

Item 253.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 253.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Compliance with the particulate emissions from the duct burners will be demonstrated to be less than 0.1 lb/MM Btu (as required by NY State SIP) with a stack compliance test in accordance with 40 CFR Part 60 EPA Method 5. Compliance will be demonstrated with a stack compliance test in accordance with 40 CFR Part 60 EPA Method 5.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 254: Compliance Demonstration
Effective between the dates of 02/26/2008 and 02/25/2013



Applicable State Requirement:6 NYCRR 227-1.2 (a) (2)

Item 254.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 254.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Compliance with the particulate emissions from the gas turbines (Emission Source GT006) in Emission Unit U-00006 will be demonstrated to be less than 0.1 lb/MM Btu (as required by NY State SIP) with a stack compliance test in accordance with 40 CFR Part 60 EPA Method 5.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 255: Compliance Demonstration
Effective between the dates of 02/26/2008 and 02/25/2013**

Applicable State Requirement:6 NYCRR 227-1.2 (a) (2)

Item 255.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00006 Emission Point: 00006

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

Item 255.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Compliance with the particulate emissions from the duct burner (Emission Control GTC06) in emission Unit U-00006 will be demonstrated to be less than 0.1 lb/MM Btu (as required by NY State SIP) with a stack compliance test in

New York State Department of Environmental Conservation

Permit ID: 2-6003-00038/00008

Facility DEC ID: 2600300038



accordance with 40 CFR Part 60 EPA Method 5. Compliance will be demonstrated with a stack compliance test in accordance with 40 CFR Part 60 EPA Method 5.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A, Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

