



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6301-00185/00009
Mod 0 Effective Date: 09/28/2007 Expiration Date: 09/27/2012
Mod 1 Effective Date: 02/05/2009 Expiration Date: 09/27/2012

Permit Issued To: ASTORIA GENERATING COMPANY LP
18-01 20TH AVE
LONG ISLAND CITY, NY 11105-4271

Contact: ANDREW W OLIVER
US POWER GENERATING COMPANY LLC
3650 JAMES ST STE 206
SYRACUSE, NY 13206
(315) 433-1371

Facility: ASTORIA GENERATING STATION
18-01 20TH AVE
ASTORIA, NY 11105

Contact: NATALIE DUBANOWITZ
ASTORIA GENERATING COMPANY LP
18-01 20TH AVE
LONG ISLAND CITY, NY 11105-4271
(718) 204-3918

Description:

PERMIT DESCRIPTION
Astoria Generating Station
DEC ID # 2-6301-00185/00009 (Ren 1, Mod 1)

This is a Title V permit major modification to Renewal 1 to place the applicable Clean Air Interstate Rule (CAIR) rules in Astoria Generating Station's Title V permit. The permit conditions for the following regulations are added to the permit modification:

1. CAIR NO_x Ozone Season Trading Program, 6 NYCRR 243, which replaces Part 204 in the year 2009 and reduces the state-wide ozone-season NO_x allocation by 335 in the year 2015 compared with the current Part 204 allocation.
2. CAIR NO_x Annual Trading Program, 6 NYCRR Part 244, which replaced the combined Part 237 and Part 204 programs in the year 2009, and reduces the state-wide annual NO_x allocation by 53% in the year 2015 compared to the current combined Part 204 and Part 237 allocations.
3. CAIR SO₂ Trading Program, 6 NYCRR Part 245, which, replaces Part 238 in the year 2010 and reduces the state-wide annual sulfur dioxide allocation by 28% in the year 2015 compared to the current Part 238 allocation.



The above permit conditions include emission monitoring, record keeping, reporting and certification requirements. are added to the permit.

Astoria Generating Station, located at 18-01 20th Avenue in Astoria, New York, is an existing electric generating facility. The facility operates four very large boilers (Boilers 20, 30, 40 & 50), rated at 1,795, 3,984, 4,074 and 4,094 MM BTU/hr, respectively; and one simple-cycle combustion turbine, rated at 243 MM BTU/hr. All the boilers combust residual oil and natural gas, except the boiler that is rated at 1,795 MM BTU/hr (Boiler 20), which combusts only natural gas. Steam from the boilers is used to drive four steam turbines and generate electricity. The combustion turbine combusts only natural gas. The Industrial Classification Code (SIC) for this facility is 4911 - Electric Services.

Astoria Generating Station consists of five emission units: A-S0001, A-S0002, A-S0003, A-S0004 and A-S0005. Below is a description of these five emission units:

Emission Unit A-S0001 consists of one very large (1,795 MM Btu/hr) Babcock & Wilcox boiler, Boiler 20 (Emission Source 00020), which combusts only natural gas (Process NG3). A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 20 was constructed and began operating on 1/1/1953 in the Boiler House, was removed from operation on 12/31/1993, and was reactivated on 9/1/2000. Boiler 20 is a single furnace with only one stack. Emissions from Boiler 20 are exhausted through one stack, which is identified as Emission Point 00021. For Boiler 20, the emission cap is as follows: 24.5 tpy of Particulates, 14.5 tpy of PM-10, 39.5 tpy of Sulfur Dioxide, 98 tpy of Carbon Monoxide, 110 tpy of NOx, 24 tpy of VOC, 0.0003 tpy of Beryllium, and 0.05 tpy of Mercury.

Emission Unit A-S0002 consists of one very large (3,984 MM BTU/hr) Babcock & Wilcox boiler, Boiler 30 (Emission Source 00030), which has the capability to burn residual oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 30 was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 30 are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NOx emissions. The NOx emissions from Boiler 30 are limited to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Emission Unit A-S0003 consists of one very large (4,074 MM Btu/hr) Combustion Engineering, Boiler 40 (Emission Source 00040), which has the capability to burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 40 was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 40 are exhausted through two different stacks, which are identified as Emission points 00041 & 00042.

Emission Unit A-S0004 consists of one very large (4,094 MM Btu/hr) Combustion Engineering, Boiler 50 (Emission Source 00050), which has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 50 was constructed and began operating on 5/1/1962 in the Boiler House. Emissions from Boiler 50 are exhausted through two different stacks, which are identified as Emission points 00051 & 00052.

Emission Unit A-S0005 consists of one 243 MM Btu/hr General electric Model 5000L simple



cycle combustion turbine, GT001 (Emission source GT001), utilized to generate electricity. The combustion turbine burns only natural gas (Process GTN) and has a diesel starter engine. Combustion Turbine GT001 was constructed and began operating on 7/1/1967 in the Gas Turbine Facility (GTFAC). Emissions from GT001 are exhausted through one stack, which is identified as Emission Point GT001.

The facility's emissions exceed the major source pollutant thresholds listed in 6 NYCRR Subpart 201-6 and, as such, the facility is subject to the provisions of Title V. The facility's emissions of NOx will be monitored continuously. In addition, the NOx emissions will be averaged from the Astoria, Gowanus, and Narrows Generating Stations, which are all owned by the applicant, according to system-wide averaging plan approved by the Department, to verify compliance with the provisions of 6 NYCRR Subpart 227-2.

This facility is required to comply with the emission cap of 6 NYCRR 201-7 and cannot be exceeded by the facility. Astoria Generating Station's facility-wide SO2 emissions shall not exceed the following limits:

- (a) 3,120 pounds per hour (based on a 3-hour average), and
- (b) 2,040 pounds per hour (based on a 24-hour average), and
- (c) 17,870,400 pounds per year (8,935.2 tpy).

The Total Phase II SO2 Allowances from Table 2 of 40 CFR 73 is as follows:

Unit	Allowance 2000-2009	Allowance 2010 and thereafter
Boiler 10	1216	1218
Boiler 20	1554	1556
Boiler 30	3023	3029
Boiler 40	2375	2380
Boiler 50	2699	2705

The facility operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c), including four internal combustion engines (<225 bhp mechanical power), five emergency diesel generators (<500 hours per year each), four distillate and residual fuel oil storage tanks (<300,000 bbls capacity), ten storage tanks (<10,000 gallons capacity), four horizontal petroleum storage tanks and one venting and exhaust system for laboratory operations.

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
- Permit modifications, suspensions or revocations by the Department

Facility Level

- 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: 6NYCRR 621.11

Item 3.1:

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

Item 3.2:

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



Item 3.3:

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

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

Item 4.1:

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

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

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18-01 20TH AVE
LONG ISLAND CITY, NY 11105-4271

Facility: ASTORIA GENERATING STATION
18-01 20TH AVE
ASTORIA, NY 11105

Authorized Activity By Standard Industrial Classification Code:
4911 - ELECTRIC SERVICES

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Permit modifications, suspensions or revocations by the Department

Facility Level

Submission of application for permit modification or renewal-REGION 2 HEADQUARTERS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6NYCRR 201-6.5(a)(7): Fees
- 3 6NYCRR 201-6.5(c): Recordkeeping and reporting of compliance monitoring
- 4 6NYCRR 201-6.5(c)(2): Monitoring, Related Recordkeeping, and Reporting Requirements.
- 5 6NYCRR 201-6.5(c)(3)(ii): Compliance Certification
- 6 6NYCRR 201-6.5(e): Compliance Certification
- 7 6NYCRR 202-2.1: Compliance Certification
- 8 6NYCRR 202-2.5: Recordkeeping requirements
- 9 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- 10 6NYCRR 200.7: Maintenance of Equipment
- 11 6NYCRR 201-1.7: Recycling and Salvage
- 12 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6NYCRR 201-3.2(a): Exempt Sources - Proof of Eligibility
- 14 6NYCRR 201-3.3(a): Trivial Sources - Proof of Eligibility
- 15 6NYCRR 201-6.5(a)(4): Standard Requirement - Provide Information
- 16 6NYCRR 201-6.5(a)(8): General Condition - Right to Inspect
- 17 6NYCRR 201-6.5(d)(5): Standard Requirements - Progress Reports
- 18 6NYCRR 201-6.5(f)(6): Off Permit Changes
- 19 6NYCRR 202-1.1: Required Emissions Tests
- 20 6NYCRR 211.3: Visible Emissions Limited
- 21 40CFR 68: Accidental release provisions.
- 22 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 23 6NYCRR 200.6: Compliance Certification
- 24 6NYCRR 200.6: Compliance Certification
- 25 6NYCRR 200.6: Compliance Certification
- 26 6NYCRR 201-6: Emission Unit Definition
- 27 6NYCRR 201-7: Facility Permissible Emissions
- *28 6NYCRR 201-7: Capping Monitoring Condition
- *29 6NYCRR 201-7: Capping Monitoring Condition
- 30 6NYCRR 204-2.1: Submissions to the Department.
- 31 6NYCRR 204-4.1: Compliance Certification
- 32 6NYCRR 204-7.1: Submission of NOx allowance transfers.
- 33 6NYCRR 204-8.1: Requirements for installation, certification, and data accounting.



- 34 6NYCRR 204-8.2: Requirements for recertification of monitoring systems.
 - 35 6NYCRR 204-8.2: Compliance Certification
 - 36 6NYCRR 204-8.3: Out of control periods.
 - 37 6NYCRR 204-8.4: Compliance Certification
 - 38 6NYCRR 204-8.7: Compliance Certification
 - 39 6NYCRR 207: Submittal of Episode Action Plans
 - 40 6NYCRR 225-1.2(a)(2): Compliance Certification
 - 41 6NYCRR 225-1.7(c): Compliance Certification
 - 42 6NYCRR 225-1.8: Compliance Certification
 - 43 6NYCRR 227-1.3: Compliance Certification
 - 44 6NYCRR 227-2.5(b): Compliance Certification
 - 1-1 6NYCRR 243-1.6(a): Permit Requirements
 - 1-2 6NYCRR 243-1.6(b): Monitoring requirements
 - 1-3 6NYCRR 243-1.6(c): NOx Ozone Season Emission Requirements
 - 1-4 6NYCRR 243-1.6(d): Excess emission requirements
 - 1-5 6NYCRR 243-1.6(e): Recordkeeping and reporting requirements
 - 1-6 6NYCRR 243-2.1: Authorization and responsibilities of CAIR
designated representative
 - 1-7 6NYCRR 243-2.4: Certificate of representation
 - 1-8 6NYCRR 243-8.1: General requirements
 - 1-9 6NYCRR 243-8.1: Prohibitions
 - 1-10 6NYCRR 243-8.3: Out of control periods
 - 1-11 6NYCRR 243-8.5(d): Quarterly reports
 - 1-12 6NYCRR 243-8.5(e): Compliance certification
 - 1-13 6NYCRR 244-1: CAIR NOx Annual Trading Program General Conditions
 - 1-14 6NYCRR 244-2: Designated CAIR Representative
 - 1-15 6NYCRR 244-8: Compliance Certification
 - 1-16 6NYCRR 245-1: CAIR SO2 Trading Program General Provisions
 - 1-17 6NYCRR 245-2: Designated CAIR Representative
 - 1-18 6NYCRR 245-8: Compliance Certification
 - 45 40CFR 72: Compliance Certification
 - 46 40CFR 75: Compliance Certification
- Emission Unit Level**
- 47 6NYCRR 201-6: Emission Point Definition By Emission Unit
 - 48 6NYCRR 201-6: Process Definition By Emission Unit
 - 49 6NYCRR 201-7: Process Permissible Emissions

EU=A-S0001

- 50 6NYCRR 227-2.6(a)(1): Testing, monitoring, and reporting
requirements for very large boilers.
- 51 6NYCRR 231-2.6: Future reduction by Emission Unit Shutdown (with
shakedown period)
- 52 6NYCRR 231-2.6: Compliance Certification
- 53 6NYCRR 231-2.6: Compliance Certification

EU=A-S0001,Proc=NG3,ES=00020

- *54 6NYCRR 201-7: Capping Monitoring Condition
- *55 6NYCRR 201-7: Capping Monitoring Condition
- *56 6NYCRR 201-7: Capping Monitoring Condition
- *57 6NYCRR 201-7: Capping Monitoring Condition
- *58 6NYCRR 201-7: Capping Monitoring Condition
- 59 6NYCRR 231-2.4(a)(1): Compliance Certification
- 60 6NYCRR 231-2.4(a)(1): Compliance Certification



EU=A-S0001,EP=00021

61 6NYCRR 227-1.3(a): Compliance Certification

EU=A-S0002

62 6NYCRR 227-2.6(a)(1): Testing, monitoring, and reporting requirements for very large boilers.

63 6NYCRR 231-2.6: Future Reduction By Over Control / Source Reduction

64 6NYCRR 231-2.6: Past Reduction By Over Control / Source Reduction

65 6NYCRR 231-2.6: Compliance Certification

EU=A-S0002,Proc=RO1,ES=00030

66 6NYCRR 227.2(b)(1): Compliance Certification

EU=A-S0002,EP=00031

67 6NYCRR 227-1.3: Compliance Certification

EU=A-S0002,EP=00032

68 6NYCRR 227-1.3: Compliance Certification

EU=A-S0003

69 6NYCRR 227-2.6(a)(1): Testing, monitoring, and reporting requirements for very large boilers.

EU=A-S0003,Proc=RO2,ES=00040

70 6NYCRR 227.2(b)(1): Compliance Certification

EU=A-S0003,EP=00041

71 6NYCRR 227-1.3: Compliance Certification

EU=A-S0003,EP=00042

72 6NYCRR 227-1.3: Compliance Certification

EU=A-S0004

73 6NYCRR 227-2.6(a)(1): Testing, monitoring, and reporting requirements for very large boilers.

74 6NYCRR 231-2.6: Future reduction by Emission Unit Shutdown (with shakedown period)

EU=A-S0004,Proc=RO3,ES=00050

75 6NYCRR 227.2(b)(1): Compliance Certification

EU=A-S0004,EP=00051

76 6NYCRR 227-1.3: Compliance Certification

EU=A-S0004,EP=00052



77 6NYCRR 227-1.3: Compliance Certification

EU=A-S0005

78 6NYCRR 227-2.6: Compliance Certification

79 6NYCRR 227-2.6: Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

80 ECL 19-0301: Contaminant List

81 6NYCRR 201-1.4: Unavoidable noncompliance and violations

82 6NYCRR 211.2: Air pollution prohibited

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 - 6NYCRR Part 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 - 6NYCRR Part 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 6NYCRR 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 Part 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 Part 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 Part 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 Part 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 Part 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 Part 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 Part 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 Part 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 Part 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 2: Fees
Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 2.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0302.

Condition 3: Recordkeeping and reporting of compliance monitoring
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 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 or a toxic 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 any of the above conditions are met, the source must notify the permitting authority by telephone or facsimile based on the timetable listed in paragraphs (1) through (4) of this section. 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 the occurrence. All deviations reported under paragraph (1) through (4) of this section must also be identified in the 6 month monitoring report required above.

If the permittee seeks to have a violation excused as



provided in 201-1.4, the permittee shall report such violations as required under 201-1.4(b). However, in no case may reports of any deviation be on a less frequent basis than those described in paragraphs (1) through (4) above. 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.

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 Compliance Monitoring and Enforcement (BCME) 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.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2008.

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

Condition 6: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

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, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.
- iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.
- iv. All 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 Compliance Monitoring and Enforcement (BCME) 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 BCME is as follows:

NYSDEC
Bureau of Compliance Monitoring
and Enforcement
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 7/30/2008.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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.

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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012**

Applicable Federal Requirement:6NYCRR 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.

**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 09/28/2007 and 09/27/2012**

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012**

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 19: Required Emissions Tests
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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 09/28/2007 and 09/27/2012

Applicable Federal Requirement:40CFR 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 09/28/2007 and 09/27/2012

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: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 200.6

Item 23.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 23.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Astoria Generating Station's facility-wide SO₂ emissions shall not exceed the following limits:



- (a) 3,120 pounds per hour (based on a 3-hour average), and
- (b) 2,040 pounds per hour (based on a 24-hour average), and
- (c) 17,870,400 pounds per year (8,935.2 tpy).

Compliance with this SO₂ emission cap limit shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions, based on accepted emission factors for SO₂. These records shall include the 3-hour average mass emissions totaled over each 24-hour daily period (the averages from 12:00 midnight to the following midnight). Emission calculations will be performed in a manner acceptable to the Department.

Process Material: FUEL CONSUMPTION

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 3,120 pounds per hour

Monitoring Frequency: CONTINUOUS

Averaging Method: 3-hour average

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 24: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 200.6

Item 24.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 24.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Astoria Generating Station's facility-wide SO₂ emissions shall not exceed the following limits:

- (a) 3,120 pounds per hour (based on a 3-hour average), and
- (b) 2,040 pounds per hour (based on a 24-hour average), and
- (c) 17,870,400 pounds per year (8,935.2 tpy).



Compliance with this SO₂ emission cap limit shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions, based on accepted emission factors for SO₂. These records shall include the daily mass emissions totaled over each 24-hour daily period (the total of hourly averages from 12:00 midnight to the following midnight). Emission calculations will be performed in a manner acceptable to the Department.

Process Material: FUEL CONSUMPTION
Parameter Monitored: SULFUR DIOXIDE
Upper Permit Limit: 8,935.2 tons per year
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 10/30/2007.
Subsequent reports are due every 3 calendar month(s).

Condition 25: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 200.6

Item 25.1:
The Compliance Certification activity will be performed for the Facility.

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

Item 25.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Astoria Generating Station's facility-wide SO₂ emissions shall not exceed the following limits:

- (a) 3,120 pounds per hour (based on a 3-hour average), and
- (b) 2,040 pounds per hour (based on a 24-hour average), and
- (c) 17,870,400 pounds per year (8,935.2 tpy).

Compliance with this SO₂ emission cap limit shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions, based on accepted emission factors for SO₂. These records shall include the 24-hour average mass emissions totaled over each 24-hour daily period (the averages from 12:00 midnight to the



following midnight). Emission calculations will be performed in a manner acceptable to the Department.

Process Material: FUEL CONSUMPTION
Parameter Monitored: SULFUR DIOXIDE
Upper Permit Limit: 2,040 pounds per hour
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 10/30/2007.
Subsequent reports are due every 3 calendar month(s).

Condition 26: Emission Unit Definition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-6

Item 26.1(From Mod 0):

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

Emission Unit: A-S0001

Emission Unit Description:

Emission Unit A-S0001 consists of one very large (1,795 MM Btu/hr) Babcock & Wilcox boiler, Boiler 20 (Emission Source 00020), which combusts only natural gas (Process NG3). A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 20 was constructed and began operating on 1/1/1953 in the Boiler House, was removed from operation on 12/31/1993, and was reactivated on 9/1/2000. Boiler 20 is a single furnace with only one stack. Emissions from Boiler 20 are exhausted through one stack, which is identified as Emission Point 00021.

Boiler 20's emission cap is as follows: 24.5 tpy of Particulates, 14.5 tpy of PM-10, 39.5 tpy of Sulfur Dioxide, 98 tpy of Carbon Monoxide, 110 tpy of NOx, 24 tpy of VOC, 0.0003 tpy of Beryllium, and 0.05 tpy of Mercury.

Building(s): BOILERHS

Item 26.2(From Mod 0):

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

Emission Unit: A-S0002

Emission Unit Description:

Emission Unit A-S0002 consists of one very large (3,984 MM Btu/hr) Babcock & Wilcox boiler, Boiler 30 (Emission Source 00030), which has the capability to burn residual



oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 30 was constructed and began operating on 9/1/1958 in the Boiler House. Boiler 30 is twin furnace boiler with two stacks/emission points. Emissions from Boiler 30 are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NO_x emissions.

The NO_x emissions from Boiler 30 are limited to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Building(s): BOILERHS

Item 26.3(From Mod 0):

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

Emission Unit: A-S0003

Emission Unit Description:

Emission Unit A-S0003 consists of one very large (4,074 MM Btu/hr) Combustion Engineering , Boiler 40 (Emission Source 00040), which has the capability to burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 40 was constructed and began operating on 9/1/1958 in the Boiler House. Boiler 40 is twin furnace boiler with two stacks/emission points. Emissions from Boiler 40 are exhausted through two different stacks, which are identified as Emission Points 00041 & 00042.

Building(s): BOILERHS

Item 26.4(From Mod 0):

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

Emission Unit: A-S0004

Emission Unit Description:

Emission Unit A-S0004 consists of one very large (4,094 MM Btu/hr) Combustion Engineering , Boiler 50 (Emission Source 00050), which has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. A very large boiler is defined as a boiler with a maximum heat input



capacity greater than 250 million Btu per hour. Boiler 50 was constructed and began operating on 5/1/1962 in the Boiler House. Boiler 50 is twin furnace boiler with two stacks/emission points. Emissions from Boiler 50 are exhausted through two different stacks, which are identified as Emission Points 00051 & 00052.

Building(s): BOILERHS

Item 26.5(From Mod 0):

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

Emission Unit: A-S0005

Emission Unit Description:

Emission Unit A-S0005 consists of one 243 MM Btu/hr General Electric Model 5000L simple cycle combustion turbine, GT001 (Emission Source GT001), utilized to generate electricity. The combustion turbine burns only natural gas (Process GTN) and has a diesel starter engine. Combustion Turbine GT001 was constructed and began operating on 7/1/1967 in the Gas Turbine Facility (GTFAC). Emissions from GT001 are exhausted through one stack, which is identified as Emission Point GT001.

Building(s): GTFAC

Condition 27: Facility Permissible Emissions
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-7

Item 27.1:

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

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

CAS No: 007446-09-5 (From Mod 1) PTE: 17,870,400
pounds per year
Name: SULFUR DIOXIDE

Condition 28: Capping Monitoring Condition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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:

6NYCRR 231-2.3(b)



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: A-S0002 Emission Point: 00031
- Emission Unit: A-S0002 Emission Point: 00032
- 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: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

For Emission Points 00031 and 00032 from Boiler 30 (Emission Source 00030), the owner or operator shall maintain a record of the quantity of each fuel fired and the resulting mass emission of oxides of nitrogen (NOx), totaled over a 365 day period beginning with the start-up of the source project. The owner or operator shall calculate, using the following formula, the 365 day rolling total of tons per year of NOx emitted from Boiler 30 (Emission source 00030), to verify compliance with its emission cap:

$R + G < 1764$ tons/year of NOx emissions, where:



R = 365 day rolling total tons of NO_x from combustion of Residual Oil

G = 365 day rolling total tons of NO_x from combustion of Natural Gas

Compliance with this NO_x emission cap limit of 1,764 tons per year from Boiler 30 (Emission Source 00030) shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions. Emission calculations will be performed in a manner acceptable to the Department.

Manufacturer Name/Model Number: Part 75 certified CEMS

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 1,764 tons per year

Reference Test Method: 40 CFR 75

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 29: Capping Monitoring Condition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 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:

6NYCRR 231-2.3(b)

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 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: A-S0002 Emission Point: 00031

Emission Unit: A-S0002 Emission Point: 00032

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

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:

For Emission Points 00031 and 00032 from Boiler 30 (Emission Source 00030), the owner or operator shall maintain a record of the quantity of each fuel fired and the resulting mass emission of carbon monoxide (CO), totaled over a 365 day period beginning with the start-up of the source project. The owner or operator shall calculate, using the following formula, the 365 day rolling total of tons per year of CO emitted from Boiler 30 (Emission Sourcr 00030), to verify compliance with its emission cap:

$R + G < 1435$ tons/year of CO emissions, where:

R = 365 day rolling total tons of CO from combustion with Residual Oil, as determined using the following equation:

$$\frac{\text{(number of days in 365 days of combustion with Residual oil)}(1000 \text{ gallons oil/total days of combustion with oil})(5 \text{ lb CO/1000 gallons Residual oil})}{1000}$$

G = 365 day rolling total tons of CO from combustion with Natural Gas, as determined using the following equation:



(number of days in 365 days of combustion with
Natural gas)(MMcf Natural gas/total
days of combustion with Natural
Gasday)(98 lb CO/MMcf)

The emission factors used in the above equations (5 lb CO/1000 gallons fuel oil, 98 lb CO/MMcf natural gas) are from the USEPA Compilation of Air Pollution Emission Factors (AP-42), Volume I, 9/98.

Compliance with this CO emission cap limit of 1,435 tons per year from Boiler 30 (Emission Source 00030) shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions. Emission calculations will be performed in a manner acceptable to the Department.

Process Material: FUEL CONSUMPTION

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 1,435 tons per year

Monitoring Frequency: DAILY

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 30: Submissions to the Department.
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-2.1

Item 30.1: Each submission under the NOx Budget Trading Program shall be submitted, signed and certified by the NOx authorized account representative for each NOx Budget source on behalf of which the submission is made. Each submission shall include a certification statement (as stated in paragraph 204-2.4(a)(4)) by the NOx authorized account representative.

Condition 31: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-4.1

Item 31.1:
The Compliance Certification activity will be performed for the Facility.

Item 31.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For each control period in which one or more NOx Budget units at a source are subject to the NOx Budget emissions limitation, the NOx authorized account representative of



the source shall submit to the Department and the Administrator by November 30 of that year, a compliance certification report for each source covering all such units.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 32: Submission of NO_x allowance transfers.
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-7.1

Item 32.1: The NO_x authorized account representatives seeking recordation of a NO_x allowance transfer shall submit the transfer to the Administrator. To be considered correctly submitted, the NO_x allowance transfer shall include the following elements in a format specified by the Administrator:

- (a) The numbers identifying both the transferor and transferee accounts;
- (b) A specification by serial number of each NO_x allowance to be transferred; and
- (c) The printed name and signature of the NO_x authorized account representative of the transferor account and the date signed.

Condition 33: Requirements for installation, certification, and data accounting.
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-8.1

Item 33.1: The owner or operator of each NO_x Budget unit must meet the following requirements. These provisions also apply to a unit for which an application for a NO_x 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 34: Requirements for recertification of monitoring systems.
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-8.2

Item 34.1: Whenever the owner or operator makes a replacement, modification, or change in a certified monitoring system that the Administrator or the Department determines significantly



affects the ability of the system to accurately measure or record NO_x mass emissions or heat input or to meet the requirements of 40 CFR 75.21 or Appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system according to 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that the Administrator or the Department determines to significantly change the flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system according to 40 CFR 75.20(b). Examples of changes which require recertification include: replacement of the analyzer, change in location or orientation of the sampling probe or site, or changing of flow rate monitor polynomial coefficients.

Condition 35: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-8.2

Item 35.1:

The Compliance Certification activity will be performed for the Facility.

Item 35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a NO_x Budget unit under paragraphs (b)(2) or (b)(3) of this section must determine, record and report NO_x mass, heat input (if required for purposes of allocations) and any other values required to determine NO_x Mass (e.g. NO_x emission rate and heat input or NO_x concentration and stack flow) using the provisions of 40 CFR 75.70(g), from the date and hour that the unit starts operating until all required certification tests are successfully completed.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 36: Out of control periods.
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-8.3

Item 36.1: Whenever any monitoring system fails to meet the quality assurance requirements of Appendix B of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

Condition 37: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-8.4

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:

The Authorized Account Representative for a NO_x Budget unit shall submit written notice to the Department and the USEPA Administrator in accordance with the requirements of this subpart as follows:

All monitoring plans or monitoring plan modifications; compliance certifications, recertifications and quarterly QA/QC reports; and, petitions for alternative monitoring, shall be submitted to the USEPA Administrator (or his/her representatives) as well as two copies to the Department (one copy to the Regional Air Pollution Control Engineer (RAPCES) in the regional office and one one copy to the Bureau of Compliance Monitoring and Enforcement (BCME) in the DEC central office. All Authorized Account Representative changes shall be sent to the NYSDEC central office.

All quarterly emission data shall be electronically filed with the USEPA Clean Air Markets Division with a copy (disc or hard copy) to the NYSDEC offices.

The address for the USEPA Administrator is as follows:

Mr. Matthew G. Boze
USEPA Clean Air Markets Division
401 M Street SW (6204J)
Washington D.C., 20460

Ms. Ann Zownir
CEM Coordinator
USEPA-Region 2
2890 Woodbridge Avenue
Edison, N.J. 08837

The address for the BCME is as follows:

NYSDEC
Bureau of Compliance Monitoring and Enforcement
625 Broadway, 2nd Floor
Albany N.Y. 12233-3258

ACR changes should be sent to the attention of:

NYSDEC
Stationary Source Planning Section
Bureau of Air Quality Planning



625 Broadway, 2nd Floor
Albany NY 12233-3251

The address for the RAPCE is as follows:

Mr. Sam Lieblich
NYSDEC - Air resources
Hunters Point Plaza
47-20 21st Street
Long Island City, NY 11101-5407

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 38: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 204-8.7

Item 38.1:

The Compliance Certification activity will be performed for the Facility.

Item 38.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a unit that elects to monitor and report NO_x Mass emissions using a NO_x concentration system and a flow system shall also monitor and report heat input at the unit level using the procedures set forth in 40 CFR Part 75.

Monitoring Frequency: HOURLY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 39: Submittal of Episode Action Plans
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 207

Item 39.1:

An episode action plan must be submitted for approval by the Department in accordance with the requirements of 6NYCRR Part 207. The plan shall contain detailed steps which will be taken by the facility to reduce air contaminant emissions during each stage of an air pollution episode. Once approved, the facility shall take whatever actions are prescribed by the episode action plan when an air pollution episode is in effect.

Condition 40: Compliance Certification



Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 40.1:

The Compliance Certification activity will be performed for the Facility.

Item 40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

No person will sell, offer for sale, purchase or use any residual oil fuel which contains sulfur in a quantity exceeding the following limitation.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: RESIDUAL FUEL (#4, #5 AND/OR #6 FUEL OIL)

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.30 percent by weight

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: MONTHLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

Subsequent reports are due every 1 calendar month(s).

Condition 41: Compliance Certification

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 225-1.7(c)

Item 41.1:

The Compliance Certification activity will be performed for the Facility.

Item 41.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Part 225-1.7(c) requires that measurements must be made daily of the rate of each fuel burned. Also, the facility must measure the gross heat content and ash content of each fuel burned (determined at least once per week), and the average electrical output (daily) and hourly generation rate. This information must be retained by the source owner for a period of three years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION



Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 42: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 225-1.8

Item 42.1:

The Compliance Certification activity will be performed for the Facility.

Item 42.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

An owner or operator of a facility which purchases and fires coal and/or oil shall submit reports to the commissioner containing fuel analysis data, information on the quantity of the fuel received, burned, and results of any stack sampling, stack monitoring and any other procedures to ensure compliance with the provisions of 6 NYCRR Part 225-1. All records shall be available for a minimum of three years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: MONTHLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

Subsequent reports are due every 1 calendar month(s).

Condition 43: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 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: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

ASTORIA GENERATING STATION
BOILERS 30, 40 & 50 OPACITY RELATED



EQUIPMENT
AND PREVENTIVE MAINTENANCE ELEMENTS

A. Opacity Incident Reporting

Permittee shall prepare opacity incident reports consistent with the requirements of this paragraph. The term "opacity incident" means smoke emissions which exhibit greater than 20% opacity (6-minute average). Opacity incident reports shall be maintained by the Permittee for a period of three years and shall be made available for inspection by the Department on demand.

Incident Reports shall identify personnel on duty, and include a brief summary of the incident and, as necessary, a sequence of events, a preliminary cause analysis, and associated corrective action requirements.

B. Opacity Reporting Compliance Audits

Permittee shall conduct monthly opacity reporting compliance audits consistent with the requirements of this paragraph.

Audits include a detailed review of all opacity charts for the prior month, confirmation that all indicated events were properly reported and documented, charts properly marked, survey sheets completed and all documentation retained. Comprehensive audits reports shall continue to be prepared to identify all relevant observations. Items tabulated include missing chart hours and survey sheets, events greater than 20% opacity, events greater than 40% opacity, total incidents, incidents reported and events covered by Incident Reports.

C. Awareness, Communications & Training

Permittee shall comply with the opacity awareness, communications and training provisions of this paragraph.

Opacity audit results and initiatives shall be formal agenda items at regular meetings conducted by the plant manager. Opacity reduction program activities shall also be discussed at the same meetings.

Opacity understanding and awareness shall be communicated on an on-going basis from station management to supervisory and operating and maintenance personnel. Permittee shall provide training in opacity regulatory requirements, fundamentals of combustion, and the balance



between NOx control, and opacity and continuous emissions monitoring interface.

D. Preventive Maintenance

Permittee shall conduct, on an ongoing basis, a preventive maintenance program as described in this paragraph.

The program shall encompass fuel, air, burner, and instrument and control system components and includes items such as fan, dampers, burners, ignitors, regulators, and related components.

The Department shall be notified of all significant additions and deletions to the preventive maintenance program. The preventive maintenance program shall include, but not be limited to, the elements of the preventive maintenance program listed below.

E. Root Cause Analysis and Corrective Action

Permittee shall conduct root cause analyses as described in this paragraph and shall take all corrective actions that are deemed necessary to maintain the facilities in full compliance with the State's opacity requirements.

A comprehensive Root Cause Analysis program including deficiency categorization and correction of categorized deficiencies was implemented in April, 1995 by Con Edison. Incident categories include oil, air, atomizing steam, ignition, burner and combustion control system deficiencies. Analysis categorization and corrective action development shall be performed monthly by Permittee's Boiler System Engineer and other station personnel. Corrections due to equipment failure, malfunction and marginal design shall be accomplished by corrective maintenance and simple design basis enhancement activities. Correction of operation deviations include focused training, minimized sootblowing and increased boiler fireside washes. Significant design basis deficiencies shall be corrected by the development and implementation of design basis enhancement projects, including, but not limited to, fuel switching and ignition and control system retrofits.

F. Quarterly Reports

Permittee shall submit to the Department quarterly reports each May 15, August 15, November 15 and February 15 which describe the activities and progress that the Permittee have made during the preceding quarter in carrying out the



requirements of paragraphs A through E above.

ASTORIA GENERATING STATION
BOILER 30 OPACITY RELATED EQUIPMENT
PREVENTIVE MAINTENANCE ELEMENTS

BURNERS

Oil Gun Inspection (When Burning Oil)
Air Slide External Inspection/Lube
Air Slide and Stationary Baffle Inspection
Gas Ignitor Inspection
Burner Heat Tracing Inspection
Steam and Oil Flexible Hoses Inspection
Check Gas Ignitor Operation
Pneumas Valve Inspection

ID FANS

Check and Adjust ID Fan Vanes
Check ID Fan Vane Drive
ID Fan Discharge Damper Inspection
ID Fan Inlet Ductwork Inspection
ID Fan PM Procedure
ID Fan Motor PM Procedure

FD FANS

FD Fan Outlet Damper Inspection
Inspect FD Fan Discharge Damper Drives
Check FD Fan Air Ducts
FD Fan PM Procedure
FD Fan Motor PM Procedure

REGULATORS

Burner Fuel Oil Regulator PM Procedure
Burner Fuel Gas Regulator PM Procedure
Atomizing Steam Regulators PM Procedure

CONTROL AIR SYSTEM

PM Procedure for Air Dryer
Check Control Air Compressor
Operation

INSTRUMENTATION

Calibrate Fuel Flow Indication & Flow
Transmitters
Calibrate Fuel Oil Pressure to Burners
Calibrate Boiler Air Flow
Calibrate O2 Indication
Calibrate Windbox Pressure
Calibrate Furnace Draft
Calibrate FD Duct Pressure

TRIPS AND ALARMS



Check Testing Alarms
Check Low Fuel Oil Pressure Alarm
Check Low Atomizing Steam Pressure Alarm
Check Lo-Lo Fuel Oil Alarm and Trip
Check Lo-Lo Fuel Gas Trips and Alarms
Check Lo-Lo Atomizing Steam Alarms and Trip
Check Hi Furnace Pressure Alarm and Trip

FUEL OIL FARM
Fuel Oil Pump PM Procedure
Fuel Oil Pump Motor PM Procedure

ASTORIA GENERATING STATION
BOILER 40 OPACITY RELATED EQUIPMENT
PREVENTIVE MAINTENANCE
ELEMENTS

BURNERS
Oil Gun Inspection (When Burning Oil)
Air Slide External Inspection/Lube
Windbox Damper Drive Inspection/Cal/Lube
Windbox ATC Inspection/Cal/Lube
Local Gauges Inspection
Steam and Oil Flexible Hoses Inspection
Burner Damper Inspection & Testing
Gas Ignitor Operation
Pneumas Valve Inspection

ID FANS
Check and Adjust ID Fan Vanes
ID Fan Vane Drive
ID Fan Discharge Damper Inspection
ID Fan PM Procedure
ID Fan Motor PM Procedure

FD FANS
FD Fan Outlet Damper Inspection
Inspect FD Fan Discharge Damper Drives
Check FD Fan Air Ducts
FD Fan PM Procedure
FD Fan Motor PM Procedure

REGULATORS
Burner Fuel Oil Regulator PM Procedure
Burner Fuel Gas Regulator PM Procedure
Atomizing Steam Regulators PM Procedure

CONTROL AIR SYSTEM
PM Procedure for Air Dryer
Check Control Air Compressor
Operation



INSTRUMENTATION

Calibrate Fuel Flow Indication & Flow Transmitters
Calibrate Fuel Oil Pressure to Burners
Calibrate Fuel Oil Temperature to Burners
Calibrate Boiler Air Flow
Calibrate O2 Indication
Calibrate Windbox Pressure
Calibrate Furnace Draft
Calibrate FD Duct Pressure

TRIPS AND ALARMS

Check Testing Alarms
Check Low Fuel Oil Pressure Alarm
Check Low Atomizing Steam Pressure Alarm
Check Lo-Lo Fuel Oil Alarm and Trip
Check Lo-Lo Fuel Gas Trips and Alarms
Check Lo-Lo Atomizing Steam Alarms and Trip
Check Hi Furnace Pressure Alarm and Trip

FUEL OIL FARM

Fuel Oil Pump PM Procedure
Fuel Oil Pump Motor PM Procedure

**ASTORIA GENERATING STATION
BOILER 50 OPACITY RELATED EQUIPMENT
PREVENTIVE MAINTENANCE ELEMENTS**

BURNERS

Oil Gun Inspection (When Burning Oil)
Air Slide External Inspection/Lube
Windbox Damper Drive Inspection/Cal/Lube
Windbox ATC Inspection/Cal Lube
Local Gauges Inspection
Steam and Oil Flexible Hoses Inspection
Burner Damper Inspection & Testing
Gas Ignitor Operation
Pneumas Valve Inspection

ID FANS

Check and Adjust LD Fan Vanes
Check ID Fan Vane Drive
ID Fan Discharge Damper Inspection
LD Fan Inlet Ductwork Inspection
ID Fan PM Procedure
ID Fan Motor PM Procedure

FD FANS

FD Fan Outlet Damper Inspection
Inspect FD Fan Discharge Damper Drives



Check FD Fan Air Ducts
FD Fan PM Procedure
FD Fan Motor PM Procedure

REGULATIONS

Burner Fuel Oil Regulator PM Procedure
Burner Fuel Gas Regulator PM Procedure
Atomizing Steam Regulators PM Procedure

CONTROL AIR SYSTEM

PM Procedure for Air Dryer
Check Control Air Compressor
Operation

INSTRUMENTATION

Calibrate Fuel Flow Indication & Flow
Transmitters
Calibrate Fuel Oil Pressure to Burners
Calibrate Fuel Oil Temperature to Burners
Calibrate Boiler Air Flow
Calibrate O2 Indication
Calibrate Windbox Pressure
Calibrate Furnace Draft
Calibrate FD Duct Pressure

TRIPS AND ALARMS

Check Testing Alarms
Check Low Fuel Oil Pressure Alarm
Check Low Atomizing Steam Pressure Alarm
Check Lo-Lo Fuel Oil Alarm and Trip
Check Lo-Lo Fuel Gas Trips and Alarms
Check Lo-Lo Atomizing Steam Alarms and Trip
Check Hi Furnace Pressure Alarm and Trip

FUEL OIL FARM

Fuel Oil Pump PM Procedure
Fuel Oil Pump Motor PM Procedure

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 44: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 227-2.5(b)

Item 44.1:

The Compliance Certification activity will be performed for the Facility.

Item 44.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Astoria Generating Company's system-wide averaging of NO_x emissions from its Astoria, Gowanus, and Narrows generating stations must be performed in accordance with the most current version of the NO_x RACT Compliance and Operating Plan approved by the Department.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 1-1: Permit Requirements

Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-1.6(a)

Item 1-1.1:

The CAIR designated representative of each CAIR NO_x Ozone Season source shall:

- (i) submit to the department a complete CAIR permit application under section 243-3.3 in accordance with the deadlines specified in section 243-3.2; and
- (ii) submit in a timely manner any supplemental information that the department determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

The owners and operators of each CAIR NO_x Ozone Season source shall have a CAIR permit issued by the department under Subpart 243-3 for the source and operate the source and the unit in compliance with such CAIR permit.

Condition 1-2: Monitoring requirements

Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-1.6(b)

Item 1-2.1:

The emissions measurements recorded and reported in accordance with Subpart 243-8 shall be used to determine compliance by each CAIR NO_x Ozone Season source with the CAIR NO_x Ozone Season emissions limitation under subdivision (c) of this section.

Condition 1-3: NO_x Ozone Season Emission Requirements

Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-1.6(c)

Item 1-3.1:

As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under section 243-6.5(a) in an



amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NOx Ozone Season units at the source, as determined in accordance with Subpart 243-8. The CAIR NOx ozone season is the period beginning May 1 of a calendar year, except as provided in section 243-1.6(c)(2), and ending on September 30 of the same year, inclusive.

A CAIR NOx Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under sections 243-8.1(b)(1), (2), (3), or (7) and for each control period thereafter.

A CAIR NOx Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of this section, for a control period in a calendar year before the year for which the CAIR NOx Ozone Season allowance was allocated.

CAIR NOx Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NOx Ozone Season Allowance Tracking System accounts in accordance with Subparts 243-6, 243-7, and 243-9.

A CAIR NOx Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NOx Ozone Season Trading Program. No provision of the CAIR NOx Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under section 243-1.5 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

A CAIR NOx Ozone Season allowance does not constitute a property right.

Upon recordation by the Administrator under Subpart 243-6, 243-7, or 243-9, every allocation, transfer, or deduction of a CAIR NOx Ozone Season allowance to or from a CAIR NOx Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Condition 1-4: Excess emission requirements
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 243-1.6(d)

Item 1-4.1:

If a CAIR NOx Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NOx Ozone Season emissions limitation, then:

(1) the owners and operators of the source and each CAIR NOx Ozone Season unit at the source shall surrender the CAIR NOx Ozone Season allowances required for deduction under section 243-6.5(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Act or applicable State law; and

(2) each ton of such excess emissions and each day of such control period shall constitute a separate violation of this Subpart, the Act, and applicable State law.



Condition 1-5: Recordkeeping and reporting requirements
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-1.6(e)

Item 1-5.1:

Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the department or the Administrator.

(i) The certificate of representation under section 243-2.4 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation under section 243-2.4 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with Subpart 243-8, provided that to the extent that Subpart 243-8 provides for a three-year period for recordkeeping, the three-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.

Condition 1-6: Authorization and responsibilities of CAIR designated representative
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-2.1

Item 1-6.1:

Except as provided under section 243-2.2, each CAIR NO_x Ozone Season source, including all CAIR NO_x Ozone Season units at the source, shall have one and only one CAIR designated representative, with regard to all matters under the CAIR NO_x Ozone Season Trading Program concerning the source or any CAIR NO_x Ozone Season unit at the source.

The CAIR designated representative of the CAIR NO_x Ozone Season source shall be selected by an agreement binding on the owners and operators of the source and all CAIR NO_x Ozone Season units at the source and shall act in accordance with the certification statement in section 243-2.4(a)(4)(iv).



Upon receipt by the Administrator of a complete certificate of representation under section 243-2.4, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NOx Ozone Season source represented and each CAIR NOx Ozone Season unit at the source in all matters pertaining to the CAIR NOx Ozone Season Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the department, the Administrator, or a court regarding the source or unit.

No CAIR permit will be issued, no emissions data reports will be accepted, and no CAIR NOx Ozone Season Allowance Tracking System account will be established for a CAIR NOx Ozone Season unit at a source, until the Administrator has received a complete certificate of representation under section 243-2.4 for a CAIR designated representative of the source and the CAIR NOx Ozone Season units at the source.

Each submission under the CAIR NOx Ozone Season Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NOx Ozone Season source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

Condition 1-7: Certificate of representation
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-2.4

Item 1-7.1:

Unless otherwise required by the department or the Administrator, documents of agreement referred to in the certificate of representation shall not be submitted to the department or the Administrator. Neither the department nor the Administrator shall be under any obligation to review or evaluate the sufficiency of such documents, if submitted.

Condition 1-8: General requirements
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-8.1

Item 1-8.1:

The owners and operators, and to the extent applicable, the CAIR designated representative, of a CAIR NOx Ozone Season unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in this Subpart and in Subpart H of 40 CFR Part 75. For purposes of complying with such requirements, the definitions in section 243-1.2 and in 40 CFR 72.2 shall apply, and the terms "affected unit," "designated



representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be deemed to refer to the terms "CAIR NOx Ozone Season unit," "CAIR designated representative," and "continuous emission monitoring system" (or "CEMS") respectively, as defined in section 243-1.2. The owner or operator of a unit that is not a CAIR NOx Ozone Season unit but that is monitored under 40 CFR 75.72(b)(2)(ii) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR NOx Ozone Season unit.

'Requirements for installation, certification, and data accounting.' The owner or operator of each CAIR NOx Ozone Season unit shall:

- (1) install all monitoring systems required under this Subpart for monitoring NOx mass emissions and individual unit heat input (including all systems required to monitor NOx emission rate, NOx concentration, stack gas moisture content, stack gas flow rate, CO2 or O2 concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.71 and 40 CFR 75.72);
- (2) successfully complete all certification tests required under section 243-8.2 and meet all other requirements of this Subpart and 40 CFR Part 75 applicable to the monitoring systems under paragraph (a)(1) of this section; and
- (3) record, report, and quality-assure the data from the monitoring systems under paragraph (a)(1) of this section.

Condition 1-9: Prohibitions
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 243-8.1

Item 1-9.1:

No owner or operator of a CAIR NOx Ozone Season unit shall use any alternative monitoring system, alternative reference method, or any other alternative to any requirement of this Subpart without having obtained prior written approval in accordance with section 243-8.6.

No owner or operator of a CAIR NOx Ozone Season unit shall operate the unit so as to discharge, or allow to be discharged, NOx emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this Subpart and 40 CFR Part 75.

No owner or operator of a CAIR NOx Ozone Season unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions discharged into the atmosphere or heat input, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this Subpart and 40 CFR Part 75.

No owner or operator of a CAIR NOx Ozone Season unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved monitoring system under this Subpart, except under any one of the



following circumstances:

- (i) during the period that the unit is covered by an exemption under section 243-1.5 that is in effect;
- (ii) the owner or operator is monitoring emissions from the unit with another certified monitoring system approved, in accordance with the applicable provisions of this Subpart and 40 CFR Part 75, by the department for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or
- (iii) the CAIR designated representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with section 243-8.2(d)(3)(i).

Condition 1-10: Out of control periods
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-8.3

Item 1-10.1:

Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable missing data procedures in Subpart D or Subpart H of, or appendix D or appendix E to, 40 CFR Part 75.

Condition 1-11: Quarterly reports
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-8.5(d)

Item 1-11.1:

The CAIR designated representative shall submit quarterly reports, as follows:

If the CAIR NOx Ozone Season unit is subject to an Acid Rain emissions limitation or a CAIR NOx emissions limitation or if the owner or operator of such unit chooses to report on an annual basis under this Subpart, the CAIR designated representative shall meet the requirements of Subpart H of 40 CFR Part 75 (concerning monitoring of NOx mass emissions) for such unit for the entire year and shall report the NOx mass emissions data and heat input data for such unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

(i) for a unit that commences commercial operation before July 1, 2007, the calendar quarter covering May 1, 2008 through June 30, 2008;

(ii) for a unit that commences commercial operation on or after July 1, 2007, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under section 243-8.1(b), unless that quarter is the third or fourth quarter of 2007 or the first quarter of 2008, in which case reporting shall commence in the quarter covering May 1, 2008 through June 30, 2008.

The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f).



For CAIR NO_x Ozone Season units that are also subject to an Acid Rain emissions limitation or the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, or the Mercury Reduction Program for Coal-Fired Electric Utility Steam Generating Units (6 NYCRR Part 246), quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR Part 75 as applicable, in addition to the NO_x mass emission data, heat input data, and other information required by this Subpart.

Condition 1-12: Compliance certification
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 243-8.5(e)

Item 1-12.1:

The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

- (1) the monitoring data submitted were recorded in accordance with the applicable requirements of this Subpart and 40 CFR Part 75, including the quality assurance procedures and specifications;
- (2) for a unit with add-on NO_x emission controls and for all hours where NO_x data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate NO_x emissions; and
- (3) for a unit that is reporting on a control period basis under subparagraph (d)(2)(ii) of this section, the NO_x emission rate and NO_x concentration values substituted for missing data under Subpart D of 40 CFR Part 75 are calculated using only values from a control period and do not systematically underestimate NO_x emissions.

Condition 1-13: CAIR NO_x Annual Trading Program General Conditions
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 244-1

Item 1-13.1:

1) As of midnight of March 1, or midnight of the first business day thereafter if March 1 is not a business day, the owners and operators shall hold, in their compliance account, Clean Air Interstate Rule (CAIR) NO_x allowances available for compliance deductions for the previous control period (January 1 through December 31), in an amount not less than the total tons of nitrogen oxides emissions from all CAIR NO_x units at the source during that control period. A CAIR NO_x allowance shall not be deducted for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.

[244-1.6(c)(1), 244-1.2(b)(5), 244-1.2(b)(36), 244-1.6(c)(3)]

2) The owners and operators shall hold in their compliance account, CAIR NO_x



allowances available for compliance deductions for the control period starting on the later of January 1, 2009 or the deadline for meeting a CAIR NO_x unit's monitor certification requirements under section 244-8.1(b)(1), (2), or (5) and for each control period thereafter. [244-1.6(c)(2)]

3) If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, the owners and operators of the CAIR NO_x source shall surrender the CAIR NO_x allowances required for deduction under 6NYCRR Part 244-6.5(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Act or applicable State law. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this permit, the Act, and applicable State law. [(244-1.6(d))]

4) Unless otherwise provided, the owners and operators of the CAIR NO_x source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the department or the Administrator: [244-1.6(e)]

(i) The certificate of representation under 6NYCRR Part 244-2.4 for the CAIR designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five year period until such documents are superseded because of the submission of a new certificate of representation under 6NYCRR Part 244-2.4 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 6NYCRR Part 244-8, provided that to the extent that 6NYCRR Part 244-8 provides for a three year period for recordkeeping, the three year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program.

Condition 1-14: Designated CAIR Representative
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 244-2

Item 1-14.1:

1) Each Clean Air Interstate Rule (CAIR) NO_x source shall have one CAIR designated representative and may have one alternate representative, as per 6NYCRR Part 244-2.2, with regard to all matters under the CAIR NO_x Annual Trading Program. The CAIR designated representative shall be selected by an agreement binding on the owners and operators of the source and act in accordance with the certification statement in 6NYCRR Part 244-2.4(a)(4)(iv). Upon receipt by the Administrator of a complete certificate of representation under 6NYCRR Part 244-2.4, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR NO_x source represented in all matters pertaining to the CAIR NO_x Annual Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the department, the Administrator, or a court regarding the source.



[244-2.1(a), (b) & (c)]

(2) Each submission under the CAIR NO_x Annual Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR NO_x source on behalf of which the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." [244-2.1(e)]

Condition 1-15: Compliance Certification
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 244-8

Item 1-15.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 1-15.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Monitoring and Reporting NO_x emissions

(1) The owners and operators, and to the extent applicable, the CAIR designated representative shall comply with all recordkeeping and reporting requirements in this condition, the applicable recordkeeping and reporting requirements under 40 CFR 75, and the requirements of 6NYCRR Part 244-2.1(e)(1).

(2) The CAIR designated representative shall submit quarterly reports of the the NO_x mass emissions data and heat input data for each CAIR NO_x unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under 6NYCRR Part 244-8.1(b), unless that quarter is the third or fourth quarter of 2007, in which case reporting shall commence in the quarter covering January 1, 2008 through March 31, 2008.



(3) The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.73(f).

(4) For CAIR NO_x units that are also subject to an Acid Rain emissions limitation or the CAIR NO_x Ozone Season Trading Program, CAIR SO₂ Trading Program, or the Mercury Reduction Program for Coal-Fired Electric Utility Steam Generating Units (6NYCRR Part 246), quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR Part 75 as applicable, in addition to the NO_x mass emission data, heat input data, and other information required by this Subpart.

(5) 'Compliance certification.' The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that:

(i) the monitoring data submitted were recorded in accordance with the applicable requirements of 6NYCRR Part 244 and 40 CFR Part 75, including the quality assurance procedures and specifications; and

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

(6) Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR part 75, data shall be substituted using the applicable missing data procedures in Subpart D or Subpart H of, or appendix D or appendix E to 40 CFR part 75. [244-8.3(a)]

(7) Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under 6NYCRR Part 244-8.1(a)(1) that may significantly affect the ability of the system to accurately measure or record NO_x mass emissions or heat input rate or to meet the quality-assurance and



quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system, and any excepted NO_x monitoring system under appendix E to 40 CFR part 75, under 6NYCRR Part 244-8.1(a)(1) are subject to the recertification requirements in 40 CFR 75.20(g)(6). [224-8.2(d)(2)]

Monitoring Frequency: CONTINUOUS
Averaging Method: ANNUAL TOTAL
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2009.
Subsequent reports are due every 3 calendar month(s).

Condition 1-16: CAIR SO₂ Trading Program General Provisions
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 245-1

Item 1-16.1:

- 1) As of midnight of March 1, or midnight of the first business day thereafter (if March 1 is not a business day) for a control period, the owners and operators of each Clean Air Interstate Rule (CAIR) SO₂ source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ allowances available for compliance deductions for the control period (January 1 through December 31) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source. A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (2) of this section, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated. [(245-1.2(b)(5), 245-1.6(c)(1), 245-1.2(b)(36), 245-1.6(c)(3)]
- 2) The owners and operators shall hold in their compliance account, CAIR SO allowances available for compliance deductions for the control period starting on the later of January 1, 2010 or the deadline for meeting a CAIR SO₂ unit's monitor certification requirements under section 245-8.1(b)(1), (2), or (5) and for each control period thereafter. [245-1.6(c)(2)]



3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source shall surrender the CAIR SO₂ allowances required for deduction under 6NYCRR Part 245-6.5(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Act or applicable State law. Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this Subpart, the Act, and applicable State law. [(245-1.6(d)]

4) Unless otherwise provided, the owners and operators of the CAIR SO₂ source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the department or the Administrator: [245-1.6(e)]

(i) The certificate of representation under 6NYCRR Part 245-2.4 for the CAIR designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation under 6NYCRR Part 245-2.4 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 6NYCRR Part 245-8, provided that to the extent that 6NYCRR Part 245-8 provides for a three-year period for recordkeeping, the three-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO₂ Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.

Condition 1-17: Designated CAIR Representative
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 245-2

Item 1-17.1:

1) Each CAIR SO₂ source shall have one and only one CAIR designated representative and may have one alternate representative, as per 6NYCRR Part 245-2.2, with regard to all matters under the CAIR SO₂ Trading Program. The CAIR designated representative of the CAIR SO₂ source shall be selected by an agreement binding on the owners and operators of the source and all CAIR SO₂ units at the source and shall act in accordance with the certification statement in 6NYCRR Part 245-2.4(a)(4)(iv). Upon receipt by the Administrator of a complete certificate of representation under 6NYCRR Part 245-2.4, the CAIR designated representative of the source shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the CAIR SO₂ source represented and each CAIR SO₂ unit at the source in all matters pertaining to the CAIR SO₂ Trading Program, notwithstanding any agreement between the CAIR designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the CAIR designated representative by the department, the Administrator, or a court regarding the source or unit. [245-2.1(a), (b) & (c)]

(2) Each submission under the CAIR SO₂ Trading Program shall be submitted, signed, and certified by the CAIR designated representative for each CAIR SO₂ source on behalf of which



the submission is made. Each such submission shall include the following certification statement by the CAIR designated representative: "I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." [245-2.1(e)]

Condition 1-18: Compliance Certification
Effective between the dates of 02/05/2009 and 09/27/2012

Applicable Federal Requirement:6NYCRR 245-8

Item 1-18.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 1-18.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Monitoring and Reporting SO₂ emissions:

1) The owners and operators, and to the extent applicable, the Clean Air Interstate Rule (CAIR) designated representative, of a CAIR SO₂ unit, shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Subpart 6 NYCRR Part 245-8 and in 40 CFR Part 75, Subparts F and G. For purposes of complying with such requirements, the definitions in section 245-1.2 and 40 CFR 72.2 shall apply, and the terms "affected unit," "designated representative," and "continuous emission monitoring system" (or "CEMS") in 40 CFR Part 75 shall be deemed to refer to the terms "CAIR SO₂ unit," "CAIR designated representative," and "continuous emission monitoring system" (or "CEMS") respectively, as defined in section 245-1.2. The owner or operator of a unit that is not a CAIR SO₂ unit but that is monitored under 40 CFR 75.16(b)(2) shall comply with the same monitoring, recordkeeping, and reporting requirements as a CAIR SO₂ unit. [245-8.1]

2)The owner or operator of each CAIR SO₂ unit shall:
[245-8.1(a)]

(i) install all monitoring systems required under this Subpart for monitoring SO₂ mass emissions and individual unit heat input (including all systems required to monitor



SO₂ concentration, stack gas moisture content, stack gas flow rate, CO₂ or O₂ concentration, and fuel flow rate, as applicable, in accordance with 40 CFR 75.11 and 40 CFR 75.16);

(ii) successfully complete all certification tests required under Part 245-8.2 and meet all other requirements of this section and 40 CFR Part 75 applicable to the monitoring systems under this section; and

(iii) record, report, and quality-assure the data from the monitoring systems under paragraph of this section.

3) The owner or operator shall meet the monitoring system certification and other requirements of section 245-8.1(a)(1) and (2) on or before the following dates.

The owner or operator shall record, report, and quality-assure the data from the monitoring systems under section 245-8.1(a)(1) on and after the following dates. [245-8.1(b)]

(i) For the CAIR SO₂ unit that commences commercial operation before July 1, 2008, by January 1, 2009.

(ii) For the CAIR SO₂ unit that commences commercial operation on or after July 1, 2008, by the later of the following dates: January 1, 2009; or 90 unit operating days or 180 calendar days, whichever occurs first, after the date on which the unit commences commercial operation.

4) Whenever the owner or operator makes a replacement, modification, or change in any certified continuous emission monitoring system under section 245-8.1(a)(1) that may significantly affect the ability of the system to accurately measure or record SO₂ mass emissions or heat input rate or to meet the quality-assurance and quality-control requirements of 40 CFR 75.21 or appendix B to 40 CFR Part 75, the owner or operator shall recertify the monitoring system in accordance with 40 CFR 75.20(b). Furthermore, whenever the owner or operator makes a replacement, modification, or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify each continuous emission monitoring system whose accuracy is potentially affected by the change, in accordance with 40 CFR 75.20(b). Examples of changes to a continuous emission monitoring system that require recertification include: replacement of the analyzer, complete replacement of an existing continuous emission monitoring system, or change in location or orientation of the sampling probe or site. Any fuel flowmeter system under section 245-8.1(a)(1) is subject to the recertification requirements in 40 CFR 75.20(g)(6). [245-8.2(d)(2)]



5) Whenever any monitoring system fails to meet the quality-assurance and quality-control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable missing data procedures in Subpart D of or appendix D to 40 CFR Part 75.

[245-8.3(a)]

6) The CAIR designated representative shall comply with all recordkeeping and reporting requirements in section 245-8.3, the applicable recordkeeping and reporting requirements in Subparts F and G of 40 CFR Part 75, and the requirements of section 245-2.1(e)(1).

[245-8.5(a)]

7) The owner or operator of a CAIR SO₂ unit shall comply with requirements of 40 CFR 75.62 for monitoring plans.

[245-8.5(b)]

8) The CAIR designated representative shall submit an application to the department within 45 days after completing all initial certification or recertification tests required under section 245-8.2, including the information required under 40 CFR 75.63. [245-8.5(c)]

]

9) The CAIR designated representative shall submit quarterly reports of the SO₂ mass emissions data and heat input data for each CAIR SO₂ unit, in an electronic quarterly report in a format prescribed by the Administrator, for each calendar quarter beginning with:

[245-8.5(d)(1)]

i) the calendar quarter covering January 1, 2009 through March 31, 2009 for a unit that commences commercial operation before July 1, 2008; or

ii) for a unit that commences commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the date of provisional certification or the applicable deadline for initial certification under section 245-8.1(b), unless that quarter is the third or fourth quarter of 2008, in which case reporting shall commence in the quarter covering January 1, 2009 through March 31, 2009.

10) The CAIR designated representative shall submit each quarterly report to the Administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in 40 CFR 75.64. [245-8.5(d)(2)]

11) For CAIR SO₂ units that are also subject to an Acid Rain emissions limitation or the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program, or the Mercury Reduction Program for Coal-Fired Electric Utility



Steam Generating Units (6 NYCRR Part 246), quarterly reports shall include the applicable data and information required by Subparts F through I of 40 CFR Part 75 as applicable, in addition to the SO₂ mass emission data, heat input data, and other information required by this Subpart. [245-8.5(d)(3)]

12) The CAIR designated representative shall submit to the Administrator a compliance certification (in a format prescribed by the Administrator) in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The certification shall state that: [245-8.5(e)]

- i) the monitoring data submitted were recorded in accordance with the applicable requirements of this Subpart and 40 CFR Part 75, including the quality assurance procedures and specifications; and
- ii) for a unit with add-on SO₂ emission controls and for all hours where SO₂ data are substituted in accordance with 40 CFR 75.34(a)(1), the add-on emission controls were operating within the range of parameters listed in the quality assurance/quality control program under appendix B to 40 CFR Part 75 and the substitute data values do not systematically underestimate SO₂ emissions.

Monitoring Frequency: CONTINUOUS
Averaging Method: ANNUAL TOTAL
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 4/30/2009.
Subsequent reports are due every 3 calendar month(s).

Condition 45: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:40CFR 72

Item 45.1:
The Compliance Certification activity will be performed for the Facility.

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

Item 45.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Astoria Generating Station is subject to the Title IV Acid Rain regulations found in 40 CFR Parts 72, 73, 75, 76, 77 and 78. The Acid Rain Permit(DEC ID #: 2-6301-00185/00017) is an attachment to this permit. As



perTitle IV permit, the facility is required to have sufficient SO₂ allowance in its possession to cover the SO₂ emissions from this facility. The facility must also submit reports as required in the Title IV permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 46: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:40CFR 75

Item 46.1:

The Compliance Certification activity will be performed for the Facility.

Item 46.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility shall comply with the reporting and record keeping requirements of 40 CFR Part 75 for Continuous Emission Monitoring.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

Condition 47: Emission Point Definition By Emission Unit
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-6

Item 47.1(From Mod 0):

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

Emission Unit: A-S0001

Emission Point: 00021

Height (ft.): 299

Diameter (in.): 164

Building: BOILERHS

Item 47.2(From Mod 0):

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

Emission Unit: A-S0002



Emission Point: 00031
Height (ft.): 299 Diameter (in.): 168
NYTMN (km.): 4515.094 NYTME (km.): 591.559 Building: BOILERHS

Emission Point: 00032
Height (ft.): 299 Diameter (in.): 168
NYTMN (km.): 4515.099 NYTME (km.): 591.566 Building: BOILERHS

Item 47.3(From Mod 0):

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

Emission Unit: A-S0003

Emission Point: 00041
Height (ft.): 299 Diameter (in.): 168
NYTMN (km.): 4515.7 NYTME (km.): 592.5 Building: BOILERHS

Emission Point: 00042
Height (ft.): 299 Diameter (in.): 168
NYTMN (km.): 4515.7 NYTME (km.): 592.5 Building: BOILERHS

Item 47.4(From Mod 0):

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

Emission Unit: A-S0004

Emission Point: 00051
Height (ft.): 299 Diameter (in.): 168
NYTMN (km.): 4515.134 NYTME (km.): 591.612 Building: BOILERHS

Emission Point: 00052
Height (ft.): 299 Diameter (in.): 168
NYTMN (km.): 4515.139 NYTME (km.): 591.619 Building: BOILERHS

Item 47.5(From Mod 0):

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

Emission Unit: A-S0005

Emission Point: GT001
Height (ft.): 28 Length (in.): 92 Width (in.): 120
NYTMN (km.): 4515.7 NYTME (km.): 592.5 Building: GTFAC

Condition 48: Process Definition By Emission Unit

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-6

Item 48.1(From Mod 0):

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

Emission Unit: A-S0001
Process: NG3 Source Classification Code: 1-01-006-01



Process Description:

Process NG3 consists of one face fired very large (1,795 MM Btu/hr) Babcock & Wilcox boiler, Boiler 20 (Emission Source 00020) in Emission Unit A-S0001 burning only natural gas. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour. Boiler 20 was constructed and began operating on 1/1/1953 in the Boiler House, was removed from operation on 12/31/1993, and was reactivated on 9/1/2000. Boiler 20 is a single furnace with only one stack. Emissions from Boiler 20 are exhausted through one stack, which is identified as Emission Point 00021.

Boiler 20 has the following emission limits:

NOx - 110 tpy
VOC - 24 tpy
CO - 98 tpy
PM-10 - 14.5 tpy
Particulates - 24.5 tpy
SO2 - 39.5 tpy
Beryllium - 0.0003 tpy
Mercury - 0.05 tpy

Emission Source/Control: 00020 - Combustion

Design Capacity: 1,795 million Btu per hour

Item 48.2(From Mod 0):

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

Emission Unit: A-S0002

Process: NG1

Source Classification Code: 1-01-006-01

Process Description:

Process NG1 is the combustion of natural gas in Boiler 30 (Emission Source 00030 in Emission Unit A-S0002. This very large boiler is one face fired Babcock & Wilcox boiler and is rated at 3,984 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 30 (Emission Source 00030) has the capability to burn residual oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. Boiler 30 (Emission Source 00030) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 30 (Emission Source 00030) are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NOx emissions. The NOx emissions from Boiler 30 are limited



to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Emission Source/Control: 00030 - Combustion
Design Capacity: 3,984 million Btu per hour

Item 48.3(From Mod 0):

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

Emission Unit: A-S0002

Process: RO1

Source Classification Code: 1-01-004-01

Process Description:

Process RO1 is the combustion of residual oil in Boiler 30 (Emission Source 00030 in Emission Unit A-S0002. This very large boiler is one face fired Babcock & Wilcox boiler and is rated at 3,984 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 30 (Emission Source 00030) has the capability to burn residual oil (Process RO1) and natural gas (Process NG1) and can fire these fuels in various combinations. Boiler 30 (Emission Source 00030) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 30 (Emission Source 00030) are exhausted through two different stacks, which are identified as Emission Points 00031 & 00032. Boiler 30 uses Flue Gas Recirculation (FGR) to control NOx emissions. The NOx emissions from Boiler 30 are limited to 1,764 tons/yr and the CO emissions from Boiler 30 are limited to 1,435 tons/yr.

Emission Source/Control: 00030 - Combustion
Design Capacity: 3,984 million Btu per hour

Item 48.4(From Mod 0):

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

Emission Unit: A-S0003

Process: NG2

Source Classification Code: 1-01-006-04

Process Description:

Process NG2 is the combustion of natural gas in Boiler 40 (Emission Source 00040 in Emission Unit A-S0003. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,074 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 40 (Emission Source 00040) has the capability to



burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. Boiler 40 (Emission Source 00040) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 40 (Emission Source 00040) are exhausted through two different stacks, which are identified as Emission Points 00041 & 00042.

Emission Source/Control: 00040 - Combustion
Design Capacity: 4,074 million Btu per hour

Item 48.5(From Mod 0):

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

Emission Unit: A-S0003

Process: RO2

Source Classification Code: 1-01-004-04

Process Description:

Process RO2 is the combustion of residual oil in Boiler 40 (Emission Source 00040 in Emission Unit A-S0003. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,074 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 40 (Emission Source 00040) has the capability to burn residual oil (Process RO2) and natural gas (Process NG2) and can fire these fuels in various combinations. Boiler 40 (Emission Source 00040) was constructed and began operating on 9/1/1958 in the Boiler House. Emissions from Boiler 40 (Emission Source 00040) are exhausted through two different stacks, which are identified as Emission Points 00041 & 00042.

Emission Source/Control: 00040 - Combustion
Design Capacity: 4,074 million Btu per hour

Item 48.6(From Mod 0):

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

Emission Unit: A-S0004

Process: NG4

Source Classification Code: 1-01-006-04

Process Description:

Process NG4 is the combustion of natural gas in Boiler 50 (Emission Source 00050 in Emission Unit A-S0004. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,094 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.



Boiler 50 (Emission Source 00050) has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. Boiler 50 (Emission Source 00050) was constructed and began operating on 5/1/1962 in the Boiler House. Emissions from Boiler 50 (Emission Source 00050) are exhausted through two different stacks, which are identified as Emission Points 00051 & 00052.

Emission Source/Control: 00050 - Combustion
Design Capacity: 4,094 million Btu per hour

Item 48.7(From Mod 0):

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

Emission Unit: A-S0004

Process: RO3

Source Classification Code: 1-01-004-04

Process Description:

Process RO3 is the combustion of residual oil in Boiler 50 (Emission Source 00050 in Emission Unit A-S0004. This very large boiler is one tangentially fired Combustion Engineering boiler and is rated at 4,094 million BTU/hr and covers the combustion of natural gas in this boiler. A very large boiler is defined as a boiler with a maximum heat input capacity greater than 250 million Btu per hour.

Boiler 50 (Emission Source 00050) has the capability to burn residual oil (Process RO3) and natural gas (Process NG4) and can fire these fuels in various combinations. Boiler 50 (Emission Source 00050) was constructed and began operating on 5/1/1962 in the Boiler House. Emissions from Boiler 50 (Emission Source 00050) are exhausted through two different stacks, which are identified as Emission Points 00051 & 00052.

Emission Source/Control: 00050 - Combustion
Design Capacity: 4,094 million Btu per hour

Item 48.8(From Mod 0):

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

Emission Unit: A-S0005

Process: GTN

Source Classification Code: 2-01-002-01

Process Description:

Process GTN is the combustion of natural gas in the General Electric Model 5000L simple cycle combustion turbine GT001 (Emission Source GT001) in Emission Unit A-S0005. This combustion turbine is rated at 243 MM



BTU/hr and is utilized to generate electricity.

The combustion turbine burns only natural gas (Process GTN) and has a diesel starter engine. Combustion Turbine GT001 was constructed and began operating on 7/1/1967 in the Gas Turbine Facility (GTFAC). Emissions from GT001 are exhausted through one stack, which is identified as Emission Point GT001.

Emission Source/Control: GT001 - Combustion

Design Capacity: 243 million Btu per hour

Condition 49: Process Permissible Emissions
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-7

Item 49.1:

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:	A-S0001	Process:	NG3
	CAS No: 000630-08-0	(From Mod 0)	
	Name: CARBON MONOXIDE		
	PTE(s): 148 pounds per hour		
			0.082 pounds per million Btus
			196,000 pounds per year
	CAS No: 0NY075-00-0	(From Mod 0)	
	Name: PARTICULATES		
	PTE(s): 55.6 pounds per hour		
			0.031 pounds per million Btus
			49,000 pounds per year
	CAS No: 0NY075-00-5	(From Mod 0)	
	Name: PM-10		
	PTE(s): 32.3 pounds per hour		
			0.018 pounds per million Btus
			29,000 pounds per year
Emission Unit:	A-S0002	Process:	NG1
	CAS No: 000630-08-0	(From Mod 0)	
	Name: CARBON MONOXIDE		
	PTE(s): 328 pounds per hour		
			0.082 pounds per million Btus
			2,900,000 pounds per year
	CAS No: 0NY075-00-0	(From Mod 0)	
	Name: PARTICULATES		
	PTE(s): 398 pounds per hour		



0.1 pounds per million Btus
3,500,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)

Name: PM-10

PTE(s): 225 pounds per hour

0.07 pounds per million Btus
1,971,000 pounds per year

Emission Unit: A-S0002 Process: RO1

CAS No: 000630-08-0 (From Mod 0)

Name: CARBON MONOXIDE

PTE(s): 133 pounds per hour

0.033 pounds per million Btus
1,200,000 pounds per year

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

Name: PARTICULATES

PTE(s): 398 pounds per hour

0.1 pounds per million Btus
3,500,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)

Name: PM-10

PTE(s): 225 pounds per hour

0.07 pounds per million Btus
1,971,000 pounds per year

Emission Unit: A-S0003 Process: NG2

CAS No: 000630-08-0 (From Mod 0)

Name: CARBON MONOXIDE

PTE(s): 330 pounds per hour

0.082 pounds per million Btus
2,900,000 pounds per year

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

Name: PARTICULATES

PTE(s): 400 pounds per hour

0.1 pounds per million Btus
3,500,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)

Name: PM-10

PTE(s): 225 pounds per hour

0.07 pounds per million Btus
1,971,000 pounds per year

Emission Unit: A-S0003 Process: RO2

CAS No: 000630-08-0 (From Mod 0)

Name: CARBON MONOXIDE



PTE(s): 133 pounds per hour
0.033 pounds per million Btus
1,200,000 pounds per year

CAS No: 0NY075-00-0 (From Mod 0)
Name: PARTICULATES
PTE(s): 400 pounds per hour
0.1 pounds per million Btus
3,500,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)
Name: PM-10
PTE(s): 225 pounds per hour
0.07 pounds per million Btus
1,971,000 pounds per year

Emission Unit: A-S0004 Process: NG4

CAS No: 000630-08-0 (From Mod 0)
Name: CARBON MONOXIDE
PTE(s): 337 pounds per hour
0.082 pounds per million Btus
2,950,000 pounds per year

CAS No: 0NY075-00-0 (From Mod 0)
Name: PARTICULATES
PTE(s): 409 pounds per hour
0.1 pounds per million Btus
3,600,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)
Name: PM-10
PTE(s): 225 pounds per hour
0.07 pounds per million Btus
1,971,000 pounds per year

Emission Unit: A-S0004 Process: RO3

CAS No: 000630-08-0 (From Mod 0)
Name: CARBON MONOXIDE
PTE(s): 137 pounds per hour
0.033 pounds per million Btus
1,200,000 pounds per year

CAS No: 0NY075-00-0 (From Mod 0)
Name: PARTICULATES
PTE(s): 409 pounds per hour
0.1 pounds per million Btus
3,600,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)
Name: PM-10
PTE(s): 225 pounds per hour



0.07 pounds per million Btus
1,971,000 pounds per year

Emission Unit: A-S0005 Process: GTN

CAS No: 000630-08-0 (From Mod 0)

Name: CARBON MONOXIDE

PTE(s): 27 pounds per hour

0.11 pounds per million Btus
230,000 pounds per year

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

Name: PARTICULATES

PTE(s): 10 pounds per hour

0.042 pounds per million Btus
89,000 pounds per year

CAS No: 0NY075-00-5 (From Mod 0)

Name: PM-10

PTE(s): 10 pounds per hour

0.042 pounds per million Btus
89,000 pounds per year

Condition 50: Testing, monitoring, and reporting requirements for very large boilers.

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 50.1:

This Condition applies to Emission Unit: A-S0001

Item 50.2:

The owner/operator shall measure NOx emissions with a continuous emissions monitoring system (CEMS) as described in 6NYCRR 227-2.6(b).

Condition 51: Future reduction by Emission Unit Shutdown (with shakedown period)

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 231-2.6

Item 51.1:

This Condition applies to Emission Unit: A-S0001

Item 51.2:

Emission Unit No (s): A-S0001

1. The permittee shall shut down the above referenced emission unit within 165 days after the scheduled first day of fuel combustion of the Astoria Repowering Project , DEC ID No. 2-6301-00185.



2. The facility shall establish 4.96 tons per year of nitrogen oxides emission reduction credits (ERCs) by the shutdown of the above referenced emission unit.
3. The facility shall establish 0.19 tons per year of volatile organic compound emission reduction credits (ERCs) by the shutdown of the above referenced emission unit.
4. The facility shall establish 2.90 tons per year of carbon monoxide emission reduction credits (ERCs) by the shutdown of the above referenced emission unit.
5. These ERCs shall only be used as offsets by the Astoria Repowering Project, DEC ID No. 2-6301-00185 to the maximum extent possible. If the Astoria Repowering Project does not use all of the established ERCs, then the remaining ERCs shall become available for sale as offsets subsequent to the shutdown of the above referenced emission units.

Condition 52: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 231-2.6

Item 52.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 52.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Records for demonstration of compliance with the CO emission limit shall be maintained on site for five years. These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period beginning with the start-up of the facility. Any exceedance of the allowable annual CO emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 98 tons per year

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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



Condition 53: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 231-2.6

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Regulated Contaminant(s):

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

Item 53.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Records for demonstration of compliance with the NO_x emission limit shall be maintained on site for five years.

These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period beginning with the start-up of the facility. Any exceedance of the allowable annual NO_x emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 110 tons per year

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 54: Capping Monitoring Condition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-7

Item 54.1:

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:

40CFR 52-A.21

Item 54.2:

Operation of this facility shall take place in accordance with the approved criteria, emission



limits, terms, conditions and standards in this permit.

Item 54.3:

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 54.4:

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 54.5:

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 54.6:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Process: NG3

Emission Source: 00020

Regulated Contaminant(s):

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

Item 54.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

PM-10 emissions from this emission source (Boiler 20) are limited to 29,000 pounds per year, on a 12-month rolling basis, so that the project will not be subject to 40 CFR 52 (PSD). A stack test shall be performed to confirm appropriate emission factors for PM-10 so that the PTE of PM-10 from this emission source can be determined and appropriate record keeping requirements for the emission cap ascertained.

The owner and/or operator shall submit a stack test protocol to the Department, for review, indicating the test procedures to be used to sample PM-10 emissions from this source and how the source will be operated during the test. Within 90 days of approval of the test protocol by the Department, the stack test must be conducted. Within 60 days following completion of the test, a test report



must be submitted to the Department for its review.

Parameter Monitored: PM-10

Upper Permit Limit: 29,000 pounds per year

Reference Test Method: TO BE DETERMINED

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 55: Capping Monitoring Condition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-7

Item 55.1:

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:

40CFR 52-A.21

Item 55.2:

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

Item 55.3:

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 55.4:

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 55.5:

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 55.6:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Process: NG3

Emission Source: 00020



Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 55.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulates emissions from Boiler 20 (Emission Source 00020) are limited to 49,000 pounds per year, on a 12-month rolling basis, so that the project will not be subject to 40 CFR 52 (PSD). A stack test shall be performed to confirm the appropriate emission factors for Particulates so that the PTE of Particulates from this emission source can be determined and appropriate record keeping requirements for the emission cap ascertained.

The owner and/or operator shall submit a stack test protocol to the Department, for review, indicating the test procedures to be used to sample Particulate emissions from this source and how the source will be operated during the test. Within 90 days of approval of the test protocol by the Department, the stack test must be conducted. Within 60 days following completion of the test, a test report must be submitted to the Department for its review.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 49,000 pounds per year

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: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 56: Capping Monitoring Condition

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-7

Item 56.1:

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:

40CFR 52-A.21

Item 56.2:

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



Item 56.3:

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 56.4:

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 56.5:

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 56.6:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Process: NG3

Emission Source: 00020

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 56.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Particulate emissions from Boiler 20 (Emission Source 00020) are limited to 49,000 pounds per year, on a 12-month rolling basis, so that the project will not be subject to 40 CFR 52 (PSD). Compliance with this emission cap limit shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions, based on accepted emission factors for Particulates derived from an initial stack test. Emission calculations will be performed in a manner acceptable to the Department.

As per Part 201-7.2(e), on an annual basis, 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 the emission unit 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 emission limit.

Process Material: NATURAL GAS
Parameter Monitored: PARTICULATES
Upper Permit Limit: 49,000 pounds per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2008.
Subsequent reports are due every 12 calendar month(s).

Condition 57: Capping Monitoring Condition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 201-7

Item 57.1:

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:

40CFR 52-A.21

Item 57.2:

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

Item 57.3:

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 57.4:

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 57.5:

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 57.6:

The Compliance Certification activity will be performed for:



Emission Unit: A-S0001

Process: NG3

Emission Source: 00020

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 57.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The SO₂ emissions from Boiler 20 (Emission Source 00020) are limited to 79,000 pounds or less during any consecutive 12 month period as determined using the following equation:

$$(\text{Total MMcf natural gas burned in a 12-month period})(0.6 \text{ lb SO}_2/\text{MMcf}) = \text{lbs SO}_2/12 \text{ months} < 79,000 \text{ lbs SO}_2$$

The emission factor used in the above equation (0.6 lb SO₂/MMcf natural gas) is from the USEPA Compilation of Air Pollution Emission Factors (AP-42) Volume I, July 1998, Table 1.4-2.

Compliance with this SO₂ emission cap limit shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions, based on accepted emission factors for SO₂. Emission calculations will be performed in a manner acceptable to the Department.

Process Material: NATURAL GAS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 79,000 pounds per year

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 58: Capping Monitoring Condition
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 201-7

Item 58.1:

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:



40CFR 52-A.21

Item 58.2:

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

Item 58.3:

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 58.4:

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 58.5:

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 58.6:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Process: NG3

Emission Source: 00020

Regulated Contaminant(s):

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

Item 58.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

PM-10 emissions from Boiler 20 (Emission Source 00020) are limited to 29,000 pounds per year, on a 12-month rolling basis, so that the project will not be subject to 40 CFR 52 (PSD). Compliance with this emission cap limit shall be demonstrated by maintaining records of the amount of fuel fired and corresponding emissions, based on accepted emission factors for PM-10 derived from an initial stack test. Emission calculations will be performed in a manner acceptable to the Department.



As per Part 201-7.2(e), on an annual basis, 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 the emission unit 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 emission limit.

Process Material: NATURAL GAS

Parameter Monitored: PM-10

Upper Permit Limit: 29,000 pounds per year

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2008.

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

Condition 59: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 231-2.4(a)(1)

Item 59.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Process: NG3

Emission Source: 00020

Regulated Contaminant(s):

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

Item 59.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility must maintain the following records on a daily basis in order to demonstrate compliance with the NO_x emission limit for Boiler 20 (Emission Source 00020):

1. Daily NO_x emissions (12:00 midnight to the following midnight); and
2. Total NO_x emissions over the previous 365-day period.

The Regional Air Pollution Control Engineer must be notified in writing within 10 working days of any contravention of the NO_x emission limit.



Manufacturer Name/Model Number: NOx CEM
Upper Permit Limit: 110 tons per year
Reference Test Method: Appendices B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: ANNUAL MAXIMUM ROLLED DAILY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2007.
Subsequent reports are due every 3 calendar month(s).

Condition 60: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 231-2.4(a)(1)

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001
Process: NG3 Emission Source: 00020

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

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The facility must maintain the following records on a daily basis in order to demonstrate compliance with the CO emission limit for Boiler 20 (Emission Source 00020):

- 1: daily CO emissions (12:00 midnight to the following midnight); and
- 2: total CO emissions over the previous 365-day period.

The Regional Air Pollution Control Engineer must be notified in writing within 10 working days of any contravention of the CO emission limit.

Manufacturer Name/Model Number: CO CEM
Upper Permit Limit: 98 tons per year
Reference Test Method: Appendices B & F
Monitoring Frequency: CONTINUOUS
Averaging Method: ANNUAL MAXIMUM ROLLED DAILY
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2007.



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

Condition 61: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 61.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0001

Emission Point: 00021

Item 61.2:

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 in reference test method 9 in Appendix A of 40 CFR 60.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9, 40 CFR 60

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2008.

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

Condition 62: Testing, monitoring, and reporting requirements for very large boilers.

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 62.1:

This Condition applies to Emission Unit: A-S0002

Item 62.2:

The owner/operator shall measure NOx emissions with a continuous emissions monitoring system (CEMS) as described in 6NYCRR 227-2.6(b).

Condition 63: Future Reduction By Over Control / Source Reduction
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 231-2.6



Item 63.1:

This Condition applies to Emission Unit: A-S0002

Item 63.2:

Emission Unit ID Number(s):

A-S0002

1. The permittee shall physically effect the carbon monoxide (CO) emission reductions a minimum of 15 days prior to the scheduled commence operation date of the Astoria Repowering Project, DEC ID No. 2-6301-00185.
2. The facility shall establish 11.0 tons per year of CO emission reduction credits (ERCs) by curtailment of the above referenced emission unit. These ERCs shall only be used by the Astoria Repowering Project, DEC ID No. 2-6301-00185 to the maximum extent possible. If the Astoria Repowering Project does not use all of the established ERCs, then the remaining ERCs shall become available for use subsequent to the physical occurrence of the emission reductions.

**Condition 64: Past Reduction By Over Control / Source Reduction
Effective between the dates of 09/28/2007 and 09/27/2012**

Applicable Federal Requirement:6NYCRR 231-2.6

Item 64.1:

This Condition applies to Emission Unit: A-S0002

Item 64.2:

Emission Unit A-S0002

The facility has established 110 tpy of Oxides of Nitrogen (NOx) emission reduction credits (ERCs) by curtailing the operation of Boiler 30 (Emission Source 00030) at the above referenced emission unit. The 110 tpy of NOx ERCs shall only be applied to the operation of Boiler 20 (Emission Source 00020) in Emission Unit A-S0001. NOx emissions from Boiler 20 shall not exceed 110 tpy as determined by continuous monitoring.

**Condition 65: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012**

Applicable Federal Requirement:6NYCRR 231-2.6

Item 65.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0002



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:

Records for demonstration of compliance with the NOx emission limit shall be maintained on site for five years. These records shall include i) mass emissions totaled over each 24-hour daily period (the total of hourly averages 12:00 midnight to the following midnight), and ii) the total mass emissions over a 365 day period beginning with the start-up of the facility. Any exceedance of the allowable annual NOx emission limitation must be reported in writing to the DEC Regional office within 10 working days of the exceedance.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 1764 tons per year

Monitoring Frequency: CONTINUOUS

Averaging Method: ANNUAL MAXIMUM ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2007.

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

Condition 66: Compliance Certification

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0002

Process: RO1

Emission Source: 00030

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 66.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

At the monitoring frequency stated below the facility



shall perform the following:

- 1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.
- 4) Facility shall keep records of all testing done at this stationary combustion installation for a period of 5 years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA RM 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 67: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 227-1.3

Item 67.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0002

Emission Point: 00031

Item 67.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Stack opacity shall not exceed 20 percent (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with this standard shall be determined by Continuous Opacity Monitoring System (COMS) data. The owner shall install, operate in accordance with manufacturer's instructions, and properly maintain, a COMS in the stack satisfying the criteria in Appendix B of 40 CFR part 60.

The owner 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 post marked by the 60th day following the end of each calendar year 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 emissions, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS down time, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS down time 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 which the COMS are required to record data.

Manufacturer Name/Model Number: Land 4500 Mark II (COMS)

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 APP B

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 11/29/2007.

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

Condition 68: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 227-1.3

Item 68.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0002

Emission Point: 00032

Item 68.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Stack opacity shall not exceed 20 percent (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with this standard shall be determined by Continuous Opacity Monitoring System (COMS) data. The owner shall install, operate in accordance with manufacturer's instructions, and properly maintain, a COMS in the stack satisfying the criteria in Appendix B of 40 CFR part 60.

The owner 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 post marked by the 60th day following the end of each calendar year 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 emissions, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS down time, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS down time 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 which the COMS are required to record data.

Manufacturer Name/Model Number: Land 4500 Mark II (COMS)

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 APP B

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 11/29/2007.

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



Condition 69: Testing, monitoring, and reporting requirements for very large boilers.

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 69.1:

This Condition applies to Emission Unit: A-S0003

Item 69.2:

The owner/operator shall measure NOx emissions with a continuous emissions monitoring system (CEMS) as described in 6NYCRR 227-2.6(b).

Condition 70: Compliance Certification

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 70.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0003

Process: RO2

Emission Source: 00040

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 70.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

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

- 1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.



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

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA RM 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 71: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 227-1.3

Item 71.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0003

Emission Point: 00041

Item 71.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Stack opacity shall not exceed 20 percent (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with this standard shall be determined by Continuous Opacity Monitoring System (COMS) data. The owner shall install, operate in accordance with manufacturer's instructions, and properly maintain, a COMS in the stack satisfying the criteria in Appendix B of 40 CFR part 60.

The owner 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 post marked by the 60th day following the end of each calendar year 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 emissions, specific identification of the cause and corrective action



taken;

(3) Identification of all periods of COMS down time, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS down time 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 which the COMS are required to record data.

Manufacturer Name/Model Number: Land 4500 Mark II (COMS)

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 APP B

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 11/29/2007.

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

Condition 72: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 227-1.3

Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0003

Emission Point: 00042

Item 72.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Stack opacity shall not exceed 20 percent (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with this standard shall be determined by Continuous Opacity Monitoring System (COMS) data. The owner shall install, operate in accordance with manufacturer's instructions, and properly maintain, a COMS in the stack satisfying the criteria in Appendix B of 40 CFR part 60.

The owner 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 post marked by the 60th day following the end of each calendar year 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 emissions, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS down time, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS down time 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 which the COMS are required to record data.

Manufacturer Name/Model Number: Land 4500 Mark II (COMS)

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 APP B

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 11/29/2007.

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

Condition 73: Testing, monitoring, and reporting requirements for very large boilers.

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 73.1:

This Condition applies to Emission Unit: A-S0004

Item 73.2:

The owner/operator shall measure NOx emissions with a continuous emissions monitoring system (CEMS) as described in 6NYCRR 227-2.6(b).

Condition 74: Future reduction by Emission Unit Shutdown (with shakedown)



period)

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 231-2.6

Item 74.1:

This Condition applies to Emission Unit: A-S0004

Item 74.2:

Emission Unit No: A-S0004

1. The permittee shall shut down the above referenced emission unit within 165 days after the scheduled first day of fuel combustion of the Astoria Repowering Project , DEC ID No. 2-6301-00185.
2. The facility shall establish 1098.0 tons per year of nitrogen oxides emission reduction credits (ERCs) by the shutdown of the above referenced emission unit.
3. The facility shall establish 31.0 tons per year of volatile organic compound emission reduction credits (ERCs) by the shutdown of the above referenced emission unit.
4. The facility shall establish 146.0 tons per year of carbon monoxide emission reduction credits (ERCs) by the shutdown of the above referenced emission unit.
5. These ERCs shall only be used as offsets by the Astoria Repowering Project, DEC ID No. 2-6301-00185 to the maximum extent possible. If the Astoria Repowering Project does not use all of the established ERCs, then the remaining ERCs shall become available for sale as offsets subsequent to the shutdown of the above referenced emission units.

Condition 75: Compliance Certification

Effective between the dates of 09/28/2007 and 09/27/2012

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

Item 75.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0004

Process: RO3

Emission Source: 00050

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 75.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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



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

- 1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.
- 4) Facility shall keep records of all testing done at this stationary combustion installation for a period of 5 years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA RM 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 76: Compliance Certification

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement: 6NYCRR 227-1.3

Item 76.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0004

Emission Point: 00051

Item 76.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Stack opacity shall not exceed 20 percent (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with this standard shall be determined by Continuous Opacity Monitoring System (COMS) data. The owner shall install, operate in accordance with manufacturer's instructions, and properly maintain, a COMS in the stack satisfying the criteria in Appendix B of 40 CFR part 60.

The owner 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 post marked by the 60th day following the end of each calendar year 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 emissions, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS down time, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS down time 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 which the COMS are required to record data.

Manufacturer Name/Model Number: Land 4500 Mark II (COMS)
Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: 40 CFR 60 APP B
Monitoring Frequency: CONTINUOUS
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 60 days after the reporting period.
The initial report is due 11/29/2007.
Subsequent reports are due every 3 calendar month(s).

Condition 77: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 227-1.3

Item 77.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0004

Emission Point: 00052

Item 77.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Stack opacity shall not exceed 20 percent (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. Compliance with this standard shall be determined by Continuous Opacity Monitoring System (COMS) data. The owner shall install, operate in accordance with manufacturer's instructions, and properly maintain, a COMS in the stack satisfying the criteria in Appendix B of 40 CFR part 60.

The owner 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 post marked by the 60th day following the end of each calendar year 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 emissions, specific identification of the cause and corrective action taken;
- (3) Identification of all periods of COMS down time, including the date, time and duration of each inoperable period, and the cause and corrective action for each COMS down time 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 which the COMS are required to record data.

Manufacturer Name/Model Number: Land 4500 Mark II (COMS)

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 APP B

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 60 days after the reporting period.

The initial report is due 11/29/2007.

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



Condition 78: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 227-2.6

Item 78.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0005

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:

Stack testing shall be performed to verify compliance of NO_x emissions from the Combustion Turbine with the most current version of the system-wide averaging plan (NO_x RACT Compliance and Operating Plan), submitted by Astoria Generating Company. All stack testing shall be done in accordance with 6NYCRR 227-2.6(c).

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 79: Compliance Certification
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable Federal Requirement:6NYCRR 227-2.6

Item 79.1:

The Compliance Certification activity will be performed for:

Emission Unit: A-S0005

Regulated Contaminant(s):

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

Item 79.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In lieu of performing a stack test on the Starter Engine associated with the Combustion Turbine, a log must be kept which lists the dates of operation of the Starter Engine and the duration of each occurrence. The log must be maintained at the facility and submitted, semi-annually to the Department, at the following address:



Hunters Point Plaza
47-40 21st Street
Long Island City, NY, 11101-5407
Att: Regional Air Pollution Control

Engineer

The information on the Starter Engine, provided to the applicant by the engine manufacturer, is attached to this permit and constitutes an enforceable part of the permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2008.

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 80: Contaminant List

Effective between the dates of 09/28/2007 and 09/27/2012

Applicable State Requirement:ECL 19-0301

Item 80.1:

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: 0NY075-00-0
Name: PARTICULATES

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

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

Condition 81: Unavoidable noncompliance and violations
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable State Requirement:6NYCRR 201-1.4

Item 81.1:

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 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 82: Air pollution prohibited
Effective between the dates of 09/28/2007 and 09/27/2012

Applicable State Requirement:6NYCRR 211.2

Item 82.1:

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.

New York State Department of Environmental Conservation

Permit ID: 2-6301-00185/00009

Facility DEC ID: 2630100185

