



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-0608-00053/00033
Effective Date: 02/08/2012 Expiration Date: 02/07/2022

Permit Issued To: JAMESTOWN BOARD OF PUBLIC UTILITIES
92 STEELE ST
PO BOX 700
JAMESTOWN, NY 14701-0700

Contact: STEVEN DINEEN
JAMESTOWN BOARD OF PUBLIC UTILITIES
92 STEELE ST PO BOX 700
JAMESTOWN, NY 14702-0700
(716) 661-1698

Facility: SAMUEL A CARLSON GENERATING STATION
136 STEELE ST
JAMESTOWN, NY 14701-6438

Contact: STEVEN DINEEN
JAMESTOWN BOARD OF PUBLIC UTILITIES
92 STEELE ST PO BOX 700
JAMESTOWN, NY 14702-0700
(716) 661-1698

Description:
The Samuel A. Carlson Generating Station (Carlson plant) is owned and operated by the Jamestown Board of Public Utilities (JBPU). It is a municipal electric power generation plant with applicable SIC code 4911, Electrical Services. The facility is located at 136 Steele Street, in the City of Jamestown, Chautauqua County. The facility operates three coal fired boilers (boilers #9, #10 and #12) and two steam turbines with a combined output of 49 megawatts (MW), associated coal and ash handling operations, an LM6000 combustion turbine and duct burner which operate solely on natural gas, a 750 kW emergency backup diesel-fired turbine that provides black start capability to the LM6000 turbine, a 73.5 MMBtu/hr natural gas fired boiler and a 23.3 MMBtu/hr natural gas fired boiler that are used to supplement district heating needs, two mechanical draft cooling towers, and one exempt combustion unit: a 500 kW emergency diesel generator. A fourth coal fired boiler, (#11) is no longer used, but is in the existing Title V permit.

This permit supplements the current Title V permit, issued on May 4, 2010, by shutting down boiler 11 on January 1, 2012, shutting down boiler 12 by January 1, 2014, updating emission unit and process descriptions for the shutdowns, and modifies particulate and Compliance Assurance Monitoring (CAM) permit conditions that reference these two boilers. The permit requirements for the other emission sources that are not affected by this permit continue to be in effect. The conditions in this permit will be incorporated into the Title V permit within one year.

New York State Department of Environmental Conservation
Facility DEC ID: 9060800053



Boiler 12 is subject to the Best Available Retrofit Technology rule (BART, 6NYCRR Part 249), and the facility has opted to permanently shut down boiler #12 on or before January 1, 2014 in order to be exempted from the BART requirements for the boiler. As required under Part 249, each BART determination such as the BART determination discussed above, will also be submitted to the USEPA for approval as a revision to the State Implementation Plan (SIP). By shutting down boiler 12 by January 1, 2014 it will not need to install BART or meet the NOx RACT requirements that become effective on July 1, 2014 (6NYCRR Part 227-2).

Boiler 11 ceased operating in 2001 when the combustion gas turbine was installed and is formally being shutdown on January 1, 2012 with this permit because it will not be used again.

The allowable particulate emission rates are based on the heat input to the stack. Since boiler #11 shut down the heat input to emission point 4 has decreased, so a new allowable particulate limit was calculated to be 0.32 pounds per million Btu (lb/mmBtu), an increase from the previous limit of 0.27 lb/mmBtu. Likewise, when boiler #12 shuts down the particulate limit for emission point 3 will become 0.32 lb/mmBtu, an increase from the previous limit of 0.26 lb/mmBtu.

The exiting Title V (five) permit calls for annual emission testing to evaluate compliance with the particulate limits for CAM and the particulate permit conditions. At the request of the facility, the frequency was changed to coincide with Relative Accuracy Test Audits (RATA) required by Part 75, the Acid Rain Program. This incorporates the testing frequency approval in a letter to Steve Dineen dated December 27, 2010.

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: DOUGLAS E BORSCHEL
 270 MICHIGAN AVE
 BUFFALO, NY 14203-2915

Authorized Signature: _____ Date: ____ / ____ / ____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

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

Facility Level

- Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS



DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 1.1:

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

Item 1.2:

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

Item 1.3:

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

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

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

Item 2.1:

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

Condition 3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

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

Item 3.2:

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

Item 3.3:

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



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

Item 4.1:

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

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

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

Condition 5: Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

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

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

New York State Department of Environmental Conservation

Permit ID: 9-0608-00053/00033

Facility DEC ID: 9060800053



Permit Under the Environmental Conservation Law (ECL)

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY
PERMIT**

IDENTIFICATION INFORMATION

Permit Issued To: JAMESTOWN BOARD OF PUBLIC UTILITIES
92 STEELE ST
PO BOX 700
JAMESTOWN, NY 14701-0700

Facility: SAMUEL A CARLSON GENERATING STATION
136 STEELE ST
JAMESTOWN, NY 14701-6438

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

Permit Effective Date: 02/08/2012

Permit Expiration Date: 02/07/2022



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 211.1: Air pollution prohibited

Emission Unit Level

EU=U-00003,EP=00003

- 2 40 CFR Part 64: Compliance Demonstration
3 40 CFR Part 64: Compliance Demonstration

EU=U-00003,EP=00003,Proc=001

- 4 6 NYCRR 227-1.2 (a) (4): Compliance Demonstration

EU=U-00003,EP=00003,Proc=001,ES=00006

- 15 6 NYCRR 227-2.5 (d): Compliance Demonstration
5 6 NYCRR 249.1 (c) (2): Compliance Demonstration

EU=U-00003,EP=00003,Proc=01A

- 6 6 NYCRR 227-1.2 (a) (4): Compliance Demonstration

EU=U-00004,EP=00004

- 16 6 NYCRR 227-2.5 (d): Compliance Demonstration
7 40 CFR Part 64: Compliance Demonstration

EU=U-00004,EP=00004,Proc=002

- 8 6 NYCRR 227-1.2 (a) (4): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 9 ECL 19-0301: Contaminant List
10 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
11 6 NYCRR Subpart 201-5: Emission Unit Definition
12 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

- 13 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
14 6 NYCRR Subpart 201-5: Process Definition By Emission Unit



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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

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

Item C: Maintenance of Equipment - 6 NYCRR 200.7

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



required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: Emergency Defense - 6 NYCRR 201-1.5

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

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

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

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



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

Item F: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

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

Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item J: Required Emission Tests - 6 NYCRR 202-1.1



An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

- Item K: Open Fires Prohibitions - 6 NYCRR 215.2**
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.
- Item 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.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Air pollution prohibited



Effective between the dates of 02/08/2012 and 02/07/2022

Applicable Federal Requirement:6 NYCRR 211.1

Item 1.1:

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.

**** Emission Unit Level ****

Condition 2: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable Federal Requirement:40 CFR Part 64

Item 2.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003

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

Item 2.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

I. CAM Description for particulate matter from boiler #9 (Emission Unit U-00003) after the permanent shut down of boiler #12:

The particulate emissions from emission unit (EU) U-00003, emission point (EP) 00003 for boiler 9 (commonly called the north stack) is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) based on the following criteria:

1. Air Pollutant - Particulate Matter (PM)
2. Applicable Regulation - 6NYCRR Part 227-1.2(a)(4)
3. Emission Limit - 0.32 lbs/mmBtu
4. Control equipment – boiler #9 has a cold side electrostatic precipitator (ESP) equipped with three fields
5. Pre-control emissions - greater than 100 tons per



year (tpy), actual emissions after controls are still greater than 100 tpy from boiler #9.

6. This permit condition takes effect when boiler #12 permanently shuts down by January 1, 2014 and replaces a similar condition for boilers #9 and #12.

II. CAM Program for particulate matter from boiler #9 (Emission Unit U-000030) after the permanent shutdown of boiler #12:

The permittee shall:

1. Conduct a particulate matter performance emission once every 4 Quality Assured (QA) operating quarters, where a QA operating quarter is defined as a calendar quarter in which the stack operates more than 168 hours, per Part 75. Thus the PM testing will be on the same schedule as the Relative Accuracy Testing Audit (RATA) required by the Acid Rain Program. The Department may request more frequent compliance testing. The testing shall follow EPA Method 5 procedures in 40 CFR Part 60, Appendix A. The permittee shall submit a stack test protocol at least 30 days prior to the scheduled testing date for Department review and approval, and submit a stack test report within 60 days of completing the testing.

2. Use opacity readings from the continuous opacity monitoring system as an indicator of continuous particulate matter control device performance. A review of historical opacity data shows that the north stack, EP 00003, typically operates at less than 5% opacity. Therefore, if any hourly average opacity measurement is greater than 5% at EP 00003 it will be an excursion. For each excursion the permittee shall investigate the cause(s), shall initiate corrective actions as necessary to minimize the occurrence of excursions, and record the cause(s), corrective action, date, time, the actual opacity average, and the threshold value of 5% opacity.

3. Use secondary voltage measured by voltage monitoring equipment at each electrostatic precipitator (ESP) as an indicator of the continuous particulate matter control device performance. A review of historical secondary voltage data shows that the average hourly voltage for the ESP, calculated as the average voltage of all three ESP fields in the ESP, are typically above 31.07 kilovolts (KV) for boiler/ESP 9. If the one-hour average voltage falls below the threshold voltage value above it will be considered an excursion. The permittee must investigate the cause(s) of each excursion, shall initiate corrective actions as necessary to minimize the occurrence of



excursions, and record the cause(s), corrective action, date, time, ESP, the actual voltage, and the respective threshold voltage.

4. The minimum data availability requirement for valid data collection for each averaging period, and the minimum data availability requirement for the averaging periods in the reporting period is 95% of the emission point operating time [64.6(b)(4)]. Hourly opacity averages shall be calculated from the 6-minute opacity averages for each clock hour. The ESP secondary voltage shall be measured and recorded at least four times an hour. The readings must be evenly spaced through the hour [40 CFR 64.3(b)(4)(ii)].

5. Semiannually, the permittee shall submit a report that:

a. Summarizes the number, duration and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.9(a)(2)(i)],

b. Summarizes the number, duration and cause for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks) [40 CFR 64.9(a)(2)(ii)], and

c. Reports the boiler (stack) operating hours during the reporting period and summarizes the excursions as a percentage of the operating hours.

6. A Quality Improvement Plan (QIP) shall be developed and implemented when there are opacity excursions, or voltage excursions for more than 5% of the operating hours during the semiannual reporting period. An exceedance of the 5% threshold shall be reported as a deviation in the semiannual and annual compliance reports [40 CFR 64.8(a)]. The elements of a QIP are included in a 40 CFR Part 64.8 permit condition in this permit.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.32 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2012.

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

Condition 3: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022



Applicable Federal Requirement:40 CFR Part 64

Item 3.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003

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

Item 3.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

I. CAM Description for particulate matter from boiler #9 and boiler # 12 (emission Unit U-00003) prior to when boiler #12 permanently shuts down:

The particulate emissions from emission unit (EU) U-00003, emission point (EP) 00003 for boilers 9 & 12 (commonly called the north stack) are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) based on the following criteria:

1. Air Pollutant - Particulate Matter (PM)
2. Applicable Regulation - 6NYCRR Part 227-1.2(a)(4)
3. Emission Limit - 0.26 lbs/mmBtu
4. Control equipment - each boiler has a cold side electrostatic precipitator (ESP) equipped with three fields
5. Pre-control emissions - greater than 100 tons per year (tpy), actual emissions after controls are still greater than 100 tpy from each emission point.
6. This condition expires when boiler #12 permanently shuts down by January 1, 2014 and is replaced by a similar condition for boiler #9 only.

II. CAM Program for particulate matter from boiler #9 and boiler # 12 (emission Unit U-00003) prior to when boiler #12 permanently shuts down:

The permittee shall:

1. Conduct a particulate matter performance emission once every 4 Quality Assured (QA) operating quarters, where a QA operating quarter is defined as a calendar quarter in which the stack operates more than 168 hours, per Part 75. Thus the PM testing will be on the same schedule as the Relative Accuracy Testing Audit (RATA) required by the Acid Rain Program. The department may request more



frequent compliance testing. The testing shall follow EPA Method 5 procedures in 40 CFR Part 60, Appendix A. The permittee shall submit a stack test protocol at least 30 days prior to the scheduled testing date for Department review and approval, and submit a stack test report within 60 days of completing the testing.

2. Use opacity readings from the continuous opacity monitoring system as an indicator of continuous particulate matter control device performance. A review of historical opacity data shows that the north stack, EP 00003, typically operates at less than 5% opacity. Therefore, if any hourly average opacity measurement is greater than 5% at EP 00003 it will be an excursion. For each excursion the permittee shall investigate the cause(s), shall initiate corrective actions as necessary to minimize the occurrence of excursions, and record the cause(s), corrective action, date, time, the actual opacity average, and the threshold value of 5% opacity.

3. Use secondary voltage measured by voltage monitoring equipment at each electrostatic precipitator (ESP) as an indicator of the continuous particulate matter control device performance. A review of historical secondary voltage data shows that the average hourly voltage for the ESPs, calculated as the average voltage of all three ESP fields in each ESP, are typically above 31.07 kilovolts (KV) for boiler/ESP 9 and 31.83 KV for boiler/ESP 12. If the one-hour average voltage falls below the threshold voltage values above it will be considered an excursion. The permittee must investigate the cause(s) of each excursion, shall initiate corrective actions as necessary to minimize the occurrence of excursions, and record the cause(s), corrective action, date, time, ESP, the actual voltage, and the respective threshold voltage.

4. The minimum data availability requirement for valid data collection for each averaging period, and the minimum data availability requirement for the averaging periods in the reporting period is 95% of the emission points operating time [64.6(b)(4)]. Hourly opacity averages shall be calculated from the 6-minute opacity averages for each clock hour. The ESP secondary voltage shall be measured and recorded at least four times an hour. The readings must be evenly spaced through the hour [40 CFR 64.3(b)(4)(ii)].

5. Semiannually, the permittee shall submit a report that:
a. Summarizes the number, duration and cause of excursions or exceedances, and the corrective actions



taken [40 CFR 64.9(a)(2)(i)],

b. Summarizes the number, duration and cause for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks) [40 CFR 64.9(a)(2)(ii)], and

c. Reports the boiler operating hours during the reporting period and summarizes the excursions as a percentage of the operating hours.

6. A Quality Improvement Plan (QIP) shall be developed and implemented when there are opacity excursions, or voltage excursions for more than 5% of the operating hours during the semiannual reporting period. An exceedance of the 5% threshold shall be reported as a deviation in the semiannual and annual compliance reports [40 CFR 64.8(a)]. The elements of a QIP are included in a 40 CFR Part 64.8 permit condition in this permit.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.26 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2012.

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

Condition 4: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable Federal Requirement: 6 NYCRR 227-1.2 (a) (4)

Item 4.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 4.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulate emission limit for Emission Unit U-00003 (boiler #9 & boiler #12) prior to when boiler #12 permanently shuts down.



- 1) No person shall cause or allow an emission into the outdoor atmosphere of particulates in excess of the permissible emission rates (specified in Table 1 of subdivision (b) of 6 NYCRR 227-1.2) from any stationary combustion installation burning coal and/or wood, coke, or any solid fuel derived from coal.
- 2) The maximum combined heat input to this stack is 487 mmBtu/hr. Using the equation $E = 1.0/(p^{0.22})$ from 6 NYCRR 227 subpart 1, section 2, table 1, footnote b, where 'E' is the permissible emission rate, and 'p' is the maximum heat input capacity in mmBtu/hr, the permissible emission rate is 0.256, which rounds to 0.26 lbs/mmBtu.
- 3) While firing coal, the facility shall conduct a compliance emission test on each boiler for particulates based on methods in 6NYCRR Parts 202-1.1 & 202-1.3, or equivalent. Stack testing shall be done according to EPA Method 5 and shall follow Department guidance for stack testing of stationary combustion installations. The compliance test shall be conducted once every 4 Quality Assured (QA) operating quarters, where a QA operating quarter is defined as a calendar quarter in which the stack operates more than 168 hours, per Part 75. Thus the PM testing will be on the same schedule as the Relative Accuracy Testing Audit (RATA) required by the Acid Rain Program.
- 4) The semiannual compliance reports shall include either
 - 1) when the next particulate stack test is planned for, or
 - 2) the date the last stack test was conducted and if it showed compliance or not.
- 5) This condition expires and is replaced by a similar condition for just boiler #9 when boiler #12 permanently shuts down by January 1, 2014.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.26 pounds per million Btus
Reference Test Method: EPA Method 5
Monitoring Frequency: ANNUALLY
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2012.
Subsequent reports are due every 6 calendar month(s).

Condition 15: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022



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

Item 15.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 001

Emission Source: 00006

Regulated Contaminant(s):

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

Item 15.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

2014 NOx RACT Compliance for Boiler 12

The facility has opted to comply with the requirements of 6NYCRR Part 227-2 (NOx RACT) which become effective in 2014 by permanently shutting down boiler #12 by January 1, 2014. This is an option in 6NYCRR Part 227-2.5(d). The department shall be notified in writing within 15 days of the unit being permanently shutting down the boiler.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 5: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022**

Applicable Federal Requirement:6 NYCRR 249.1 (c) (2)

Item 5.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003

Emission Point: 00003

Process: 001

Emission Source: 00006

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility has opted to permanently shut down boiler #12 by January 1, 2014 in order to be exempted from the Best Available Retrofit Technology (BART) requirements for the boiler (6NYCRR Part 249). The Department must be notified within 15 days of shutting down boiler #12.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE



Condition 6: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable Federal Requirement: 6 NYCRR 227-1.2 (a) (4)

Item 6.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00003 Emission Point: 00003
Process: 01A

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

Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulate emission limit for Emission Unit U-00003 (boiler #9) after the permanent shutdown of boiler #12.

- 1) No person shall cause or allow an emission into the outdoor atmosphere of particulates in excess of the permissible emission rates (specified in Table 1 of subdivision (b) of 6 NYCRR 227-1.2) from any stationary combustion installation burning coal and/or wood, coke, or any solid fuel derived from coal.
- 2) The maximum combined heat input to this stack is 190 mmBtu/hr. Using the equation $E = 1.0/(p^{0.22})$ from 6 NYCRR 227 subpart 1, section 2, table 1, footnote b, where 'E' is the permissible emission rate, and 'p' is the maximum heat input capacity in mmBtu/hr, the permissible emission rate is 0.315, which rounds to 0.32 lbs/mmBtu.
- 3) While firing coal, the facility shall conduct a compliance emission test on each boiler for particulates based on methods in 6NYCRR Parts 202-1.1 & 202-1.3, or equivalent. Stack testing shall be done according to EPA Method 5 and shall follow Department guidance for stack testing of stationary combustion installations. The compliance test shall be conducted once every 4 Quality Assured (QA) operating quarters, where a QA operating quarter is defined as a calendar quarter in which the stack operates more than 168 hours, per Part 75. Thus the PM testing will be on the same schedule as the Relative Accuracy Testing Audit (RATA) required by the Acid Rain Program.

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Permit ID: 9-0608-00053/00033

Facility DEC ID: 9060800053



4) The semiannual compliance reports shall include either
1) when the next particulate stack test is planned for, or
2) the date the last stack test was conducted and if it showed compliance or not.

5) This condition becomes effective and replaces a similar condition for boilers #9 and #12 when boiler #12 permanently shuts down by January 1, 2014.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.32 pounds per million Btus
Reference Test Method: EPA Method 5
Monitoring Frequency: ANNUALLY
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2012.
Subsequent reports are due every 6 calendar month(s).

Condition 16: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022

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

Item 16.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 16.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:
2014 NOx RACT Compliance for Boiler 11

The facility has opted to comply with the requirements of 6NYCRR Part 227-2 (NOx RACT) which become effective in 2014 by permanently shutting down boiler #11 on January 1, 2012.

Monitoring Frequency: SINGLE OCCURRENCE
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 7: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable Federal Requirement:40 CFR Part 64



Item 7.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00004 Emission Point: 00004

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

Item 7.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

I. CAM Description for particulate matter from boiler #10 (Emission Unit U-00004):

The particulate emissions from emission unit (EU) U-00004, EP 00004 for boilers 10 & 11 (commonly called the south stack) are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) based on the following criteria:

1. Air Pollutant - Particulate Matter (PM)
2. Applicable Regulation - 6NYCRR Part 227-1.2(a)(4)
3. Emission Limit - 0.32 lbs/mmBtu
4. Control Equipment – boiler #10 has a cold side electrostatic precipitator (ESP) equipped with three fields
5. Pre-control emissions - greater than 100 tons per year (tpy), actual emissions after controls are still greater than 100 tpy from the emission point.

II. CAM Program for particulate matter from boiler #10 (Emission Unit U-00004):

The permittee shall:

1. Conduct a particulate matter performance emission once every 4 Quality Assured (QA) operating quarters, where a QA operating quarter is defined as a calendar quarter in which the stack operates more than 168 hours, per Part 75. Thus the PM testing will be on the same schedule as the Relative Accuracy Testing Audit (RATA) required by the Acid Rain Program. The department may request more frequent compliance testing. The testing shall follow EPA Method 5 procedures in 40 CFR Part 60, Appendix A. The permittee shall submit a stack test protocol at least 30 days prior to the scheduled testing date for Department review and approval, and submit a stack test report within 60 days of completing the testing.



2. Use opacity readings from the continuous opacity monitoring system as an indicator of continuous particulate matter control device performance. A review of historical opacity data shows that the south stack, EP 00004, typically operates at less than 10% opacity. Therefore, if any hourly average opacity measurement is greater than 10% at EP 00004 it will be an excursion. For each excursion the permittee shall investigate the cause(s), shall initiate corrective actions as necessary to minimize the occurrence of excursions, and record the cause(s), corrective action, date, time, the actual opacity average, and the threshold value of 10% opacity.
3. Use secondary voltage measured by voltage monitoring equipment at the electrostatic precipitator (ESP) as an indicator of the continuous particulate matter control device performance. A review of historical secondary voltage data shows that the average hourly voltage for the ESP, calculated as the average voltage of all three ESP fields in the ESP, are typically above 32.30 kilovolts (KV) for boiler/ESP 10. If the one-hour average voltage falls below the threshold voltage above it will be considered an excursion. The permittee must investigate the cause(s) of each excursion, shall initiate corrective actions as necessary to minimize the occurrence of excursions, and record the cause(s), corrective action, date, time, ESP, the actual voltage, and the respective threshold voltage.
4. The minimum data availability requirement for valid data collection for each averaging period, and the minimum data availability requirement for the averaging periods in the reporting period is 95% of the emission point operating time [64.6(b)(4)]. Hourly opacity averages shall be calculated from the 6-minute opacity averages for each clock hour. The ESP secondary voltage shall be measured and recorded at least four times an hour. The readings must be evenly spaced through the hour [40 CFR 64.3(b)(4)(ii)].
5. Semiannually, the permittee shall submit a report that:
 - a. Summarizes the number, duration and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.9(a)(2)(i)],
 - b. Summarizes the number, duration and cause for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks) [40 CFR 64.9(a)(2)(ii)], and
 - c. Reports the boiler operating hours during the reporting period and summarizes the excursions as a



percentage of the operating hours.

6. A Quality Improvement Plan (QIP) shall be developed and implemented when there are opacity excursions, or voltage excursions for more than 5% of the operating hours during the semiannual reporting period. An exceedance of the 5% threshold shall be reported as a deviation in the semiannual and annual compliance reports [40 CFR 64.8(a)].

The elements of a QIP are included in a 40 CFR Part 64.8 permit condition in this permit.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.32 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2012.

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

Condition 8: Compliance Demonstration
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable Federal Requirement: 6 NYCRR 227-1.2 (a) (4)

Item 8.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00004

Emission Point: 00004

Process: 002

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulate Matter Emission Limit for Emission Unit U-00004 (boiler #10).

1) No person shall cause or allow an emission into the outdoor atmosphere of particulates in excess of the permissible emission rates (specified in Table 1 of subdivision (b) of 6 NYCRR 227-1.2) from any stationary combustion installation burning coal and/or wood, coke, or any solid fuel derived from coal.



2) The maximum combined heat input to the stack is 190 mmBtu/hr. Using the equation $E = 1.0/(p^{0.22})$ from 6 NYCRR 227 subpart 1, section 2, table 1, footnote b, where 'E' is the permissible emission rate, and 'p' is the maximum heat input capacity in mmBtu/hr, the permissible emission rate is 0.315, which rounds to 0.32 lbs/mmBtu.

3) While firing coal, the facility shall conduct a compliance emission test on each boiler for particulates based on methods in 6NYCRR Parts 202-1.1 & 202-1.3, or equivalent. Stack testing shall be done according to EPA Method 5 and shall follow Department guidance for stack testing of stationary combustion installations. The compliance test shall be conducted once every 4 Quality Assured (QA) operating quarters, where a QA operating quarter is defined as a calendar quarter in which the stack operates more than 168 hours, per Part 75. Thus the PM testing will be on the same schedule as the Relative Accuracy Testing Audit (RATA) required by the Acid Rain Program.

4) The semiannual compliance reports shall include either
1) when the next particulate stack test is planned for, or
2) the date the last stack test was conducted and if it showed compliance or not.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.32 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: ANNUALLY

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2012.

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



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1) , and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

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

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.



Condition 9: Contaminant List
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable State Requirement:ECL 19-0301

Item 9.1:

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

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

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

Condition 10: Unavoidable noncompliance and violations
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable State Requirement:6 NYCRR 201-1.4

Item 10.1:

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 11: Emission Unit Definition
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 11.1:

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

Emission Unit: U-00003

Emission Unit Description:

This emission unit was created for emission point 3. Two coal fired steam boilers (commonly known as boilers #9 and #12) emit to one common stack (EP 00003), also known as the North Stack. Boiler #9, designated as a large boiler, has a nominal heat input rate of 190 mmBtu/hr. Boiler #12, designated as a very large boiler, has a nominal heat input rate of 297 mmBtu/hr. The boilers primarily fire coal as described in process 001. However, distillate oil is used to bring the boilers up to temperature during startup and other conditions when necessary, as described in process 007. Both boilers were retrofitted with low NOx burners to comply with the emission requirements of NOx RACT. Boiler #12 will shutdown by January 1, 2014 in order for it to be exempt from BART requirements as well as the NOx RACT requirements that would otherwise become effective on July 1, 2014. When boiler 12 shuts down processes 001 and 007 will be replaced by processes 01A and 07A respectively.

Until boiler #12 shuts down, emission unit 3 consists of emission point 00003 (the north stack), emission source 00001 (boiler #9), emission source/control 00003 (the electrostatic precipitator that serves boiler #9), emission source 00004 (boiler #12), emission source/control 00PAC (the powdered activated carbon system



that serves boiler #12), emission source/control 00WTR (the Consol water spray system that serves boiler #12), and emission source/control 00006 (the electrostatic precipitator that serves boiler #12). Once boiler #12 shuts down, emission unit 3 will consist of emission point 00003, emission source 00001, and emission source controls 00001 and 00003.

Building(s): SA CARLSON

Item 11.2:

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

Emission Unit: U-00004

Emission Unit Description:

This emission unit was created for emission point 4. One coal fired steam boiler (commonly known as boiler #10) emits to stack EP 00004, also known as the South Stack. The boiler is designated as large boiler and has a nominal heat input rates of 190 mmBtu/hr. The boiler primarily fires coal as described in process 002. However, distillate oil is used to bring the boiler up to temperature during start up and other conditions when necessary as described in process 008. Low NOx burners are used to comply with the emission requirements of NOx RACT. Emission unit 4 consists of emission point 00004 (the south stack), emission source/control 00007 (boiler #10) and emission source 00009 (the electrostatic precipitator that serves boiler #10). On a historical note, emission source 0000A (boiler #11) and emission source/control 0000C (the electrostatic precipitator that serves boiler #11) where part of this emission unit before it shut down.

Building(s): SA CARLSON

Condition 12: Visible Emissions Limited
Effective between the dates of 02/08/2012 and 02/07/2022

Applicable State Requirement:6 NYCRR 211.2

Item 12.1:

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

**** Emission Unit Level ****

Condition 13: Emission Point Definition By Emission Unit
Effective between the dates of 02/08/2012 and 02/07/2022



Applicable State Requirement:6 NYCRR Subpart 201-5

Item 13.1:

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

Emission Unit: U-00003

Emission Point: 00003

Height (ft.): 195

Diameter (in.): 120

NYTMN (km.): 4668.894 NYTME (km.): 148.728 Building: SA CARLSON

Item 13.2:

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

Emission Unit: U-00004

Emission Point: 00004

Height (ft.): 195

Diameter (in.): 84

NYTMN (km.): 4668.91 NYTME (km.): 148.715 Building: SA CARLSON

**Condition 14: Process Definition By Emission Unit
Effective between the dates of 02/08/2012 and 02/07/2022**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 14.1:

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

Emission Unit: U-00003

Process: 001

Source Classification Code: 1-01-002-02

Process Description:

Firing bituminous coal in two dry bottom, wall fired boilers (#9 and #12) that exhaust through one common stack (EP 00003). Electrostatic precipitators control particulate emissions from each boiler. One boiler (#9) is classified as a large boiler, the other boiler is classified as a very large boiler (#12). A Powdered Activated Carbon injection system (00PAC) and a Consol water spray system (00WTR) are used as needed to facilitate the control of mercury emissions from boiler #12. This process (001) will be replaced with process 01A when boiler #12 shuts down by January 1, 2014.

Emission Source/Control: 00001 - Combustion

Design Capacity: 190 million Btu per hour

Emission Source/Control: 00004 - Combustion

Design Capacity: 297 million Btu per hour

Emission Source/Control: 00003 - Control

Control Type: ELECTROSTATIC PRECIPITATOR



Emission Source/Control: 00006 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

Emission Source/Control: 00PAC - Control
Control Type: ACTIVATED CARBON INJECTION

Emission Source/Control: 00WTR - Control
Control Type: WATER INJECTION

Item 14.2:

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

Emission Unit: U-00003
Process: 007 Source Classification Code: 1-01-005-01
Process Description:

This process is for boiler startup using #2 fuel oil. Two dry bottom, wall fired boilers (#9 and #12) are operated and emit to one common stack. Each boiler has four burners which are ignited using #2 fuel oil upon boiler startup, each oil burner is rated at 5 mmBtu/hr. This process (007) will be replaced by process 07A when boiler #12 shuts down.

Emission Source/Control: 00001 - Combustion
Design Capacity: 190 million Btu per hour

Emission Source/Control: 00004 - Combustion
Design Capacity: 297 million Btu per hour

Emission Source/Control: 00003 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

Emission Source/Control: 00006 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

Item 14.3:

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

Emission Unit: U-00003
Process: 01A Source Classification Code: 1-01-002-02
Process Description:

Firing bituminous coal in a dry bottom wall fired boiler (#9) that exhausts through stack (EP 00003). An electrostatic precipitator controls particulate emissions from the boiler, which is classified as a large boiler. Process 01A replaces Process 001 upon the permanent shutdown of boiler #12 which will occur by January 1, 2014.

Emission Source/Control: 00001 - Combustion
Design Capacity: 190 million Btu per hour



Emission Source/Control: 00003 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

Item 14.4:

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

Emission Unit: U-00003
Process: 07A Source Classification Code: 1-01-005-01

Process Description:

This process is for boiler startup using #2 fuel oil. One dry bottom wall fired boiler (#9) is operated and emits to stack EP 00003. The boiler has four burners which are ignited using #2 fuel oil upon boiler startup, each oil burner is rated at 5 mmBtu/hr. Process 07A replaces Process 007 upon the permanent shutdown of boiler #12 which will occur by January 1, 2014.

Emission Source/Control: 00001 - Combustion
Design Capacity: 190 million Btu per hour

Emission Source/Control: 00003 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

Item 14.5:

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

Emission Unit: U-00004
Process: 002 Source Classification Code: 1-01-002-02

Process End Date: 12/31/2012

Process Description:

Firing bituminous coal in one dry bottom, wall fired boiler (#10) which exhausts through one emission stack (EP 00004). An electrostatic precipitator controls particulate emissions from the boiler, which is classified as a large boiler.

Emission Source/Control: 00007 - Combustion
Design Capacity: 190 million Btu per hour

Emission Source/Control: 00009 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

Item 14.6:

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

Emission Unit: U-00004
Process: 008 Source Classification Code: 1-01-005-01

Process End Date: 12/31/2012

Process Description:

This process is for boiler startup using #2 fuel oil. One dry bottom, wall fired boiler (#10) is operated and

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emits to stack EP 00004. The boiler has four oil burners which are ignited using #2 fuel oil upon startup of the boilers, each oil burner is rated at 5 mmBtu/hr.

Emission Source/Control: 00007 - Combustion
Design Capacity: 190 million Btu per hour

Emission Source/Control: 00009 - Control
Control Type: ELECTROSTATIC PRECIPITATOR

