



New York State Department of Environmental Conservation
Facility DEC ID: 2620400059

(Processes O14 & O56) as a backup. The emissions from all six boilers all exhaust through one stack (Emission Point C0001). Process G14 is for firing of natural gas and Process O14 is the firing of # 6 fuel oil in Boilers # 1, # 2, # 3 & # 4, respectively. Process G56 is the firing of natural gas and Process O56 is the firing of # 6 fuel oil in Boilers # 5 & # 6; respectively. The four smaller boilers rated at 60 MM Btu/hr were constructed in 1962, and the two larger boilers rated at 95 MM Btu/hr were constructed around 1971. The residual oil must not contain more than 0.30% sulfur by weight. The NO_x RACT requirements are to be met by operating the boilers so that the oxygen content of the exhaust gas follows the "Plant Oxygen vs Steam Flow" curves that were developed during the NO_x RACT compliance stack testing conducted on May 5 thru May 17, 2003. There are twelve sets of curves (24 curves total), two sets for each boiler and one set of curves for each process for each boiler. The stack has a continuous opacity monitor (COMS).

The following includes a detailed summary of the modifications to the Title V Renewal permit:

1. The three Ethylene Oxide Sterilizers:

As of July 31, 2003, the facility has removed the three ethylene oxide (EtO) sterilizers. The compliance plan to eliminate the three EtO sterilizers was submitted on May 15, 2003. The three sterilizers used a 12/88 gas mixture (12% by weight ethylene oxide, EtO, and 88% by weight dichlorodifluoromethane, CFC-12) as the sterilant for medical equipment used in the hospital. As a result of the removal of the three ethylene oxide sterilizers, two of which were identical AMSCO Model 2057 and the other one was AMSCO Model 2037, the following items have been removed from the facility, and hence from the Title V permit renewal: Emission Unit U-E0001, Emission Point E0001, Process 007 and Emission Sources/controls ETS01, ETS02, ETS03 and ETSCT and their requirements of 6 NYCRR 212.3(a) and 6 NYCRR 212.9. Emission control ETSCT was never constructed.

2. NO_x RACT Limits:

The facility has modified changes in Emission Unit U-C0001 pertaining to the operation of the facility's six boilers, Boilers # 1, # 2, # 3, # 4, # 5 & # 6 (Emission Sources B0001, B0002, B0003, B0004, B0005 & B0006; respectively) in accordance with the Plant Oxygen O2 vs. Steam Flow Load curves. Previous surrogate percent oxygen limits for NO_x RACT requirements were replaced by revised "percent Oxygen in Flue Gas vs. Steam load" Curves (Curves 5.2.1-2 thru 5.2.6-2 when firing natural gas and Curves 5.2.1-1 thru 5.2.6-1 when firing # 6 fuel oil), that were developed as a result of NO_x RACT compliance stack testing conducted on May 5 thru May 17, 2003 and reported in "Boiler NO_x RACT Compliance Emission Evaluation for Mount Sinai Medical Center, Volume 1 "dated June 20, 2003. This report was submitted to NYSDEC on July 17, 2003. All twelve sets of curves (24 curves) for the six boilers can be found in Appendix A at the end of this permit.

The Boiler NO_x RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve curves, one set of two curves for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one set of two curves for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.



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At all times, each of the six boilers are to be operated according to the Plant Oxygen O₂ vs. Steam Flow Load Curves (Curves 5.2.1-2 thru 5.2.6-2 when firing natural gas and Curves 5.2.1-1 thru 5.2.6-1 when firing # 6 fuel oil) that were developed during the May 5-17, 3003 stack testing and were reported ton June 23, 2003 to the Department, to demonstrate compliance with the NO_x limit of 0.10 lbs/MM BTU when firing natural gas and with the NO_x limit of 0.30 lbs/MM BTU when firing # 6 fuel oil as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boilers B0001, B0002, B0003, B0004, B0005 and B0006.

The The NO_x RACT Compliance Plan is based on an emission testing program and report dated July, 2003 for demonstration of compliance with NO_x RACT. **The NO_x RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil).** In this stack test program, two parameters were monitored for NO_x Compliance; the Plant Oxygen O₂ % and the Steam Flow in pounds per hour. Oxygen O₂ % is monitored in the exhaust as a surrogate for NO_x limit for the boiler. The corresponding stack test results defining each curve are "tabulated below each set of curves. All results are below emission rate limits."

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The twelve Plant Oxygen O₂ vs. Steam Flow Load Curves as described as:

1. For Boiler # 1 (Emission Source B0001), Curve 5.2.1-2 when firing natural gas, and Curve 5.2.1-1 when firing # 6 fuel oil.
2. For Boiler # 2 (Emission Source B0002), Curve 5.2.2-2 when firing natural gas, and Curve 5.2.2-1 when firing # 6 fuel oil.
3. For Boiler # 3 (Emission Source B0003), Curve 5.2.3-2 when firing natural gas, and Curve 5.2.3-1 when firing # 6 fuel oil.
4. For Boiler # 4 (Emission Source B0004), Curve 5.2.4-2 when firing natural gas, and Curve 5.2.4-1 when firing # 6 fuel oil.
5. For Boiler # 5 (Emission Source B0005), Curve 5.2.5-2 when firing natural gas, and Curve 5.2.5-1 when firing # 6 fuel oil.
6. For Boiler # 6 (Emission Source B0006), Curve 5.2.6-2 when firing natural gas, and Curve 5.2.6-1 when firing # 6 fuel oil.

The facility utilizes current Westinghouse combustion management process controls with the Plant Oxygen O₂ vs. Steam Flow Load compliance curves (Curves 5.2.1-2 thru 5.2.6-2 when firing natural gas and Curves 5.2.1-1 thru 5.2.6-1 when firing # 6 fuel oil) as controlling algorithm for NO_x emissions as part of the Evaluation Report for the NO_x RACT Compliance Plan for each of the six boilers. The



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control system is complete with graphics representing real time monitoring and hourly averaging of percent O2 in flue gas and boiler steam flow rate.

With the six boilers firing # 6 fuel oil, the PTE for the emissions of NOx is 565 tpy, which is greater than the Title V applicability limit of 25 tpy, and the PTE of sulfur dioxide is 591 tpy, which is greater than the 100 tpy applicability limit, and the PTE of particulates is 188 tpy, which is greater than the 100 tpy limit. With the six boilers firing only natural gas, the PTE for NOx is 188, which is greater than the 25 tpy applicability limit.

The facility is subject to the provisions of Title V for sulfur dioxide and is subject to 6 NYCRR 225-1, fuel composition, sampling, analysis and use - sulfur limitations, which restrict the sulfur content of # 2 fuel oil utilized throughout the facility to 0.20 % by weight or less, and restricts the sulfur content of # 6 fuel oil utilized throughout the facility to 0.30 % by weight or less. The Emission Point (C0001) is subject to the particulate and smoke emission and corrective action requirements of 6 NYCRR 227-1, stationary combustion installations of 0.10 lbs/MM BTU. The stack has a continuous opacity monitor (COMS). The facility is also subject to 6 NYCRR 227-2.4(c)(2), Reasonably Available Control Technology (RACT), for oxides of nitrogen for mid-size boilers as explained above.

The facility campus has eleven diesel generators, which are used as an emergency backup power source and can fire distillate fuel oil (# 2 fuel oil). Each emergency generator is exempt from permitting requirements providing restrictive operation is maintained (operating less than 500 hours annually). The facility shall keep records to demonstrate that each engine operates below the limit. Each engine burns diesel fuel (distillate oil) which must not contain more than 0.20% by weight sulfur.

The facility campus contains one tank, Tank # 006 (Emission Source TK006 in Emission Unit U-C0001), which is a 20,000 gallon distillate oil storage tank, for which the facility is required to have available the tank dimensions and an analysis showing the capacity of the tank to comply with the New Source Performance Standards (NSPS) of 40 NYCRR Part 60 subpart Kb. The rest of the tanks (eight tanks) were constructed before the applicability dates of subpart K, Ka, and Kb or are smaller than the applicability volumes.

The facility operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c), including eleven emergency diesel generators (<500 hours per year each), eight distillate and residual oil storage tanks ranging between 800 and 50,000gallons, (<300,000 barrels), and three hundred and three laboratory fume hoods.

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
DIVISION OF ENVIRONMENTAL PERMITS
ONE HUNTERS POINT PLAZA, 47-40 21ST STREET
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 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 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:



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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



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Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: MOUNT SINAI MEDICAL CENTER
1 GUSTAVE L LEVY PL
NEW YORK, NY 10029-6504

Facility: MOUNT SINAI HOSPITAL
1 GUSTAVE L LEVY PL
NEW YORK, NY 10029

Authorized Activity By Standard Industrial Classification Code:
8062 - GENERAL MEDICAL & SURGICAL HOSPITALS

Permit Effective Date:

Permit Expiration Date:



LIST OF CONDITIONS

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 202-2.5: Recordkeeping requirements
- 10 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- 11 6NYCRR 200.7: Maintenance of Equipment
- 24 6NYCRR 201-1.7: Recycling and Salvage
- 23 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 12 6NYCRR 201-3.2(a): Exempt Sources - Proof of Eligibility
- 13 6NYCRR 201-3.3(a): Trivial Sources - Proof of Eligibility
- 14 6NYCRR 201-6.5(a)(4): Standard Requirement - Provide Information
- 15 6NYCRR 201-6.5(a)(8): General Condition - Right to Inspect
- 16 6NYCRR 201-6.5(d)(5): Standard Requirements - Progress Reports
- 17 6NYCRR 201-6.5(f)(6): Off Permit Changes
- 18 6NYCRR 202-1.1: Required Emissions Tests
- 19 6NYCRR 211.3: Visible Emissions Limited
- 20 40CFR 68: Accidental release provisions.
- 21 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 22 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 25 6NYCRR 201-3.2(c): Compliance Certification
- 26 6NYCRR 201-6: Emission Unit Definition
- 27 6NYCRR 201-6: Emission Unit Definition
- 28 6NYCRR 201-6.5(c)(3): Compliance Certification
- 29 6NYCRR 201-6.5(g): Non Applicable requirements
- 30 6NYCRR 225-1.2(d): Compliance Certification
- 31 6NYCRR 225-1.2(d): Compliance Certification
- 32 6NYCRR 225-1.8(a): Compliance Certification
- 33 6NYCRR 227-1.7(a): Emission data

Emission Unit Level

- 34 6NYCRR 201-6: Emission Point Definition By Emission Unit
- 35 6NYCRR 201-6: Emission Point Definition By Emission Unit
- 36 6NYCRR 201-6: Process Definition By Emission Unit
- 37 6NYCRR 201-6: Process Definition By Emission Unit

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EU=U-C0001

- 38 6NYCRR 227-1.2(a)(1): Compliance Certification
- 39 6NYCRR 227-1.4(b): Compliance Certification
- 40 40CFR 60.116(b), NSPS Subpart Kb: Compliance Certification

EU=U-C0001,EP=C0001

- 41 6NYCRR 227-1.2(b): Multiple combustion sources.
- 42 6NYCRR 227-1.3: Compliance Certification
- 43 6NYCRR 227.2(b)(1): Compliance Certification

EU=U-C0001,EP=C0001,Proc=G14,ES=B0001

- 44 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=G14,ES=B0002

- 45 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=G14,ES=B0003

- 46 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=G14,ES=B0004

- 47 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=G56,ES=B0005

- 48 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=G56,ES=B0006

- 49 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=O14,ES=B0001

- 50 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=O14,ES=B0002

- 51 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=O14,ES=B0003

- 52 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=O14,ES=B0004

- 53 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=O56,ES=B0005

- 54 6NYCRR 227-2.4(c)(2): Compliance Certification

EU=U-C0001,EP=C0001,Proc=O56,ES=B0006

- 55 6NYCRR 227-2.4(c)(2): Compliance Certification



STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 56 ECL 19-0301: Contaminant List
- 57 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 58 6NYCRR 201-5.3(b): Compliance Demonstration
- 59 6NYCRR 211.2: Air pollution prohibited
- 60 6NYCRR 211.2: Air pollution prohibited



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



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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 - 6NYCRR 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

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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

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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



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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 for entire length of Permit**

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



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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 for entire length of Permit

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 for entire length of Permit

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 for entire length of Permit

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



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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 for entire length of Permit

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 (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.

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

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

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

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.3(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

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

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

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

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

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

Applicable Federal Requirement: 6NYCRR 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:

Compliance certifications shall contain the following



information:

- 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.

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.

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

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The address for the BCME is as follows:

NYSDEC
Bureau of Compliance Monitoring
and Enforcement
625 Broadway
Albany, NY 12233-3258

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due on the same day each year

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

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 for entire length of Permit**

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.



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

**Condition 9: Recordkeeping requirements
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 202-2.5

Item 9.1:

(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 10: Open Fires Prohibited at Industrial and Commercial Sites
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 215

Item 10.1:

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 11: Maintenance of Equipment
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 200.7

Item 11.1:

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



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accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

Condition 24: Recycling and Salvage
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-1.7

Item 24.1:

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 23: Prohibition of Reintroduction of Collected Contaminants to the air
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-1.8

Item 23.1:

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 12: Exempt Sources - Proof of Eligibility
Effective for entire length of Permit

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

Item 12.1:

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 13: Trivial Sources - Proof of Eligibility
Effective for entire length of Permit

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

Item 13.1:

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



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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: Standard Requirement - Provide Information
Effective for entire length of Permit

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

Item 14.1:

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 15: General Condition - Right to Inspect
Effective for entire length of Permit

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

Item 15.1:

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 16: Standard Requirements - Progress Reports
Effective for entire length of Permit

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

Item 16.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least



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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 17: Off Permit Changes
Effective for entire length of Permit

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

Item 17.1:

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

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

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

Condition 18: Required Emissions Tests
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 202-1.1

Item 18.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time. 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 19: Visible Emissions Limited



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Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 211.3

Item 19.1:

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 20: Accidental release provisions.

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 68

Item 20.1:

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 21: Recycling and Emissions Reduction

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 82, Subpart F

Item 21.1:

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

Condition 22: Recycling and Emissions Reduction

Effective for entire length of Permit



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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 25: Compliance Certification
Effective for entire length of Permit**

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

Item 25.1:

The Compliance Certification activity will be performed for the Facility.

Item 25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

- 1) The facility has eleven diesel generators which are exempt from permitting provided each engine operates less than 500 hours per year.
- 2) Records shall be kept for each diesel engine, which shows the hours it operated each month.
- 3) Semi-annually the number of hours each engine operated during the preceding twelve month period shall be reported to the Department.
- 4) Compliance with this condition shall be reported semi-annually, by evaluating the hours each engine operated during a twelve month period.

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 26: Emission Unit Definition

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Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-6

Item 26.1:

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

Emission Unit: U-C0001

Emission Unit Description:

Emission unit U-C0001 consists of a total of six boilers, four are identical Combustion Engineering Type 13.5 (VU-10)-168 boilers, Boilers # 1, # 2, # 3 & # 4 (Emission Sources B0001, B0002, B0003 & B0004) with a nominal rated capacity of 60 MM Btu/hr heat input and 50,000 pounds per hour of steam output each, and two are identical Erie City/16M Keystone boilers, Boilers # 5 & # 6 (Emission Sources B0005 & B0006) with a nominal rated capacity of 95 MM Btu/hr heat input and 80,000 pounds per hour of steam output each. Each boiler is capable of firing natural gas or # 6 fuel oil (residual fuel). There are separate burners for each fuel. Process G14 is the firing of natural gas in the operation of Boilers #1, # 2, # 3 and # 4 (Emission Sources B0001, B0002, B0003 & B0004), and Process O14 is the firing of # 6 fuel oil in the operation of the same four boilers. Process G56 is the firing of natural gas in the operation of Boilers # 5 & # 6 (Emission Sources B0005 & B0006), and Process O56 is the firing of # 6 fuel oil in the operation of the same two boilers. There are separate burners for each fuel. There is a common stack for these boilers, which is located in the Annenberg building. There are nine fuel oil storage tanks that are exempt from permitting, however; Tank 006 constructed in 1997 shall comply Subpart Kb in 40 CFR 60.

The maximum total heat input from these six boilers is 430 MM BTU/hr, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

The facility will comply with the NO_x RACT emission limitation of 0.10 lb NO_x per MMBtu when firing natural gas, and with the NO_x RACT emission limitation of 0.30 lb NO_x per MMBtu when firing # 6 fuel oil (residual oil).

The Boiler NO_x RACT Compliance Emission Evaluation Report



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contains upper and lower percent oxygen limits depicted in a series of twelve curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

Building(s): ANNENBERG
 KCC
 KCC & ANN

Condition 27: Emission Unit Definition
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-6

Item 27.1:

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

Emission Unit: U-C0001

Emission Unit Description:

Emission unit U-C0001 consists of a total of six boilers, four are identical Combustion Engineering Type 13.5 (VU-10)-168 boilers, Boilers # 1, # 2, # 3 & # 4 (Emission Sources B0001, B0002, B0003 & B0004) with a nominal rated capacity of 60 MM Btu/hr heat input and 50,000 pounds per hour of steam output each, and two are identical Erie City/16M Keystone boilers, Boilers # 5 & # 6 (Emission Sources B0005 & B0006) with a nominal rated capacity of 95 MM Btu/hr heat input and 80,000 pounds per hour of steam output each. Each boiler is capable of firing natural gas or # 6 fuel oil (residual fuel). There are separate burners for each fuel. Process G14 is the firing of

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natural gas in the operation of Boilers #1, # 2, # 3 and # 4 (Emission Sources B0001, B0002, B0003 & B0004), and Process O14 is the firing of # 6 fuel oil in the operation of the same four boilers. Process G56 is the firing of natural gas in the operation of Boilers # 5 & # 6 (Emission Sources B0005 & B0006), and Process O56 is the firing of # 6 fuel oil in the operation of the same two boilers. There are separate burners for each fuel. There is a common stack for these boilers, which is located in the Annenberg building. There are nine fuel oil storage tanks that are exempt from permitting, however; Tank 006 constructed in 1997 shall comply Subpart Kb in 40 CFR 60.

The maximum total heat input from these six boilers is 430 MM BTU/hr, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

The facility will comply with the NO_x RACT emission limitation of 0.10 lb NO_x per MMBtu when firing natural gas, and with the NO_x RACT emission limitation of 0.30 lb NO_x per MMBtu when firing # 6 fuel oil (residual oil).

The Boiler NO_x RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler



operators specific to this matter.

Building(s): ANNENBERG
 KCC
 KCC & ANN

Condition 28: Compliance Certification
Effective for entire length of Permit

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

Item 28.1:

The Compliance Certification activity will be performed for the Facility.

Item 28.2:

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.

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.



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

Condition 29: Non Applicable requirements
Effective for entire length of Permit

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

Item 29.1:

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

Condition 30: Compliance Certification
Effective for entire length of Permit

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

Item 30.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility shall not purchase or use any DISTILLATE FUEL OIL (No. 2 oil) which contains sulfur in a quantity exceeding a maximum percent of sulfur by weight of 0.20. Distillate oil is used in the eleven emergency backup generators.

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2) The facility shall keep the following documentation on file for each oil delivery:

- i) Supplier name
- ii) Date of shipment
- iii) The quantity of fuel received
- iv) Sulfur analysis results and the analysis method used to determine the sulfur content
- v) The above records shall be kept on site for 5 years and be made available to Department staff upon request.

3) Semi-annually the facility shall report if the sulfur content of fuel delivered complied with the sulfur content limit above.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.20 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 31: Compliance Certification
Effective for entire length of Permit

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

Item 31.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 31.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility shall not purchase or use any residual fuel oil (# 6 fuel oil) which contains sulfur in a quantity

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exceeding a maximum percent of sulfur by weight of 0.30.

2) The facility shall keep the following documentation on file for each oil delivery:

- i) Supplier name
- ii) Date of shipment
- iii) The quantity of fuel received
- iv) Sulfur analysis results and the analysis method used to determine the sulfur content
- v) The above records shall be kept on site for 5 years and be made available to Department staff upon request.

3) Semi-annually the facility shall report if the sulfur content of fuel delivered complied with the sulfur content limit above.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 6 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.30 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 32: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 225-1.8(a)

Item 32.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The facility will retain fuel oil supplier

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certifications for each shipment of oil received, up to a period of 3 years. Each certification will contain the following:

1. The supplier name,
2. Date of shipment,
3. Quantity shipped,
4. Sulfur content, and
5. The method used to determine the sulfur content.

Such certifications will be made available to NYSDEC upon request. A written record of the type of fuel, amount of fuel, and weight percent sulfur in the fuel burned in each combustion source will be maintained on a daily basis.

Monitoring Frequency: PER DELIVERY

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 33: Emission data
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 227-1.7(a)

Item 33.1:

Any person who owns or operates a stationary combustion installation subject to 6 NYCRR Part 227-1 shall provide emissions data when so requested by the commissioner.

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

**Condition 34: Emission Point Definition By Emission Unit
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-6

Item 34.1:

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

Emission Unit: U-C0001



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Emission Point: C0001

Height (ft.): 514

Length (in.): 108

Width (in.): 42

NYTMN (km.): 4515.888 NYTME (km.): 588.234 Building: ANNENBERG

**Condition 35: Emission Point Definition By Emission Unit
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-6

Item 35.1:

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

Emission Unit: U-C0001

Emission Point: C0001

Height (ft.): 514

Length (in.): 108

Width (in.): 42

NYTMN (km.): 4515.888 NYTME (km.): 588.234 Building: ANNENBERG

**Condition 36: Process Definition By Emission Unit
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-6

Item 36.1:

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

Emission Unit: U-C0001

Process: G14

Source Classification Code: 1-02-006-02

Process Description:

Process G14 is the firing of natural gas in the operation of the four identical boilers, Boilers #1, # 2, # 3 and # 4 (Emission Sources B0001, B0002, B0003 & B0004) in Emission Unit U-C0001. Emission Sources B0001, B0002, B0003 & B0004 are four identical Combustion Engineering type 13.5 (VU-10)-168 boilers with a nominal rated capacity of 60 MM Btu/hr heat input and 50,000 pounds per hour of steam output each. The maximum total heat input from these four boilers is 240 MM BTU/hr. In addition to these four boilers, two more boilers (95 MM BTU/hr each and are identified as Emission Source B0005 & B0006, and operate on natural gas via Process G56) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.



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Emission Source/Control: B0001 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0002 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0003 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0004 - Combustion
Design Capacity: 60 million Btu per hour

Item 36.2:

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

Emission Unit: U-C0001

Process: G56

Source Classification Code: 1-02-006-02

Process Description:

Process G56 is the firing of natural gas in the operation of the two identical boilers, Boilers # 5 & # 6 (Emission Sources B0005 & B0006) in Emission Unit U-C0001. Emission Sources B0005 & B0006 are two identical Erie City/16M Keystone boilers with a nominal rated capacity of 95 MM Btu/hr heat input and 80,000 pounds per hour of steam output each. The maximum total heat input from these two boilers is 190 MM BTU/hr. In addition to these two boilers, four more boilers (60 MM BTU/hr each, are identified as Emission Sources B0001, B0002, B0003 & B0004, and operate on natural gas via Process G14) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0005 - Combustion
Design Capacity: 95 million Btu per hour

Emission Source/Control: B0006 - Combustion
Design Capacity: 95 million Btu per hour

Item 36.3:

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

Emission Unit: U-C0001

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Process: O14

Source Classification Code: 1-02-004-02

Process Description:

Process O14 is the firing of # 6 fuel oil (residual oil) in the operation of the four identical boilers, Boilers #1, # 2, # 3 and # 4 (Emission Sources B0001, B0002, B0003 & B0004) in Emission Unit U-C0001. Emission Sources B0001, B0002, B0003 & B0004 are four identical Combustion Engineering type 13.5 (VU-10)-168 boilers with a nominal rated capacity of 60 MM Btu/hr heat input and 50,000 pounds per hour of steam output each. The maximum total heat input from these four boilers is 240 MM BTU/hr. In addition to these four boilers, two more boilers (95 MM BTU/hr each, are identified as Emission Sources B0005 & B0006, and operate on # 6 fuel oil via Process O56) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0001 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0002 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0003 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0004 - Combustion
Design Capacity: 60 million Btu per hour

Item 36.4:

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

Emission Unit: U-C0001

Process: O56

Source Classification Code: 1-02-004-02

Process Description:

Process O56 is the firing of # 6 fuel oil (residual oil) in the operation of the two identical boilers, Boilers # 5 & # 6 (Emission Sources B0005 & B0006) in Emission Unit U-C0001. Emission Sources B0005 & B0006 are two identical Erie City/16M Keystone boilers with a nominal rated capacity of 95 MM Btu/hr heat input and 80,000 pounds per hour of steam output each. The maximum total heat input from these two boilers is 190 MM BTU/hr. In addition to



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these two boilers, four more boilers (60 MM BTU/hr each, are identified as Emission Source B0001, B0002, B0003 & B0004, and operate on # 6 fuel oil via Process O14) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0005 - Combustion
Design Capacity: 95 million Btu per hour

Emission Source/Control: B0006 - Combustion
Design Capacity: 95 million Btu per hour

**Condition 37: Process Definition By Emission Unit
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-6

Item 37.1:

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

Emission Unit: U-C0001

Process: G14

Source Classification Code: 1-02-006-02

Process Description:

Process G14 is the firing of natural gas in the operation of the four identical boilers, Boilers #1, # 2, # 3 and # 4 (Emission Sources B0001, B0002, B0003 & B0004) in Emission Unit U-C0001. Emission Sources B0001, B0002, B0003 & B0004 are four identical Combustion Engineering type 13.5 (VU-10)-168 boilers with a nominal rated capacity of 60 MM Btu/hr heat input and 50,000 pounds per hour of steam output each. The maximum total heat input from these four boilers is 240 MM BTU/hr. In addition to these four boilers, two more boilers (95 MM BTU/hr each and are identified as Emission Source B0005 & B0006, and operate on natural gas via Process G56) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0001 - Combustion



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Design Capacity: 60 million Btu per hour

Emission Source/Control: B0002 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0003 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0004 - Combustion
Design Capacity: 60 million Btu per hour

Item 37.2:

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

Emission Unit: U-C0001

Process: G56

Source Classification Code: 1-02-006-02

Process Description:

Process G56 is the firing of natural gas in the operation of the two identical boilers, Boilers # 5 & # 6 (Emission Sources B0005 & B0006) in Emission Unit U-C0001. Emission Sources B0005 & B0006 are two identical Erie City/16M Keystone boilers with a nominal rated capacity of 95 MM Btu/hr heat input and 80,000 pounds per hour of steam output each. The maximum total heat input from these two boilers is 190 MM BTU/hr. In addition to these two boilers, four more boilers (60 MM BTU/hr each, are identified as Emission Sources B0001, B0002, B0003 & B0004, and operate on natural gas via Process G14) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0005 - Combustion
Design Capacity: 95 million Btu per hour

Emission Source/Control: B0006 - Combustion
Design Capacity: 95 million Btu per hour

Item 37.3:

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

Emission Unit: U-C0001

Process: O14

Source Classification Code: 1-02-004-02

Process Description:

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Process O14 is the firing of # 6 fuel oil (residual oil) in the operation of the four identical boilers, Boilers #1, # 2, # 3 and # 4 (Emission Sources B0001, B0002, B0003 & B0004) in Emission Unit U-C0001. Emission Sources B0001, B0002, B0003 & B0004 are four identical Combustion Engineering type 13.5 (VU-10)-168 boilers with a nominal rated capacity of 60 MM Btu/hr heat input and 50,000 pounds per hour of steam output each. The maximum total heat input from these four boilers is 240 MM BTU/hr. In addition to these four boilers, two more boilers (95 MM BTU/hr each, are identified as Emission Sources B0005 & B0006, and operate on # 6 fuel oil via Process O56) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0001 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0002 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0003 - Combustion
Design Capacity: 60 million Btu per hour

Emission Source/Control: B0004 - Combustion
Design Capacity: 60 million Btu per hour

Item 37.4:

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

Emission Unit: U-C0001

Process: O56

Source Classification Code: 1-02-004-02

Process Description:

Process O56 is the firing of # 6 fuel oil (residual oil) in the operation of the two identical boilers, Boilers # 5 & # 6 (Emission Sources B0005 & B0006) in Emission Unit U-C0001. Emission Sources B0005 & B0006 are two identical Erie City/16M Keystone boilers with a nominal rated capacity of 95 MM Btu/hr heat input and 80,000 pounds per hour of steam output each. The maximum total heat input from these two boilers is 190 MM BTU/hr. In addition to these two boilers, four more boilers (60 MM BTU/hr each, are identified as Emission Source B0001, B0002, B0003 &



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B0004, and operate on # 6 fuel oil via Process O14) are collectively identified as Emission Unit U-C0001, and all of the six boilers supply both hot water and steam for the space heating and the air conditioning of the building. Emissions from all of the six boilers are exhausted through one common stack which is identified as Emission Point C0001.

Emission Source/Control: B0005 - Combustion
Design Capacity: 95 million Btu per hour

Emission Source/Control: B0006 - Combustion
Design Capacity: 95 million Btu per hour

Condition 38: Compliance Certification
Effective for entire length of Permit

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

Item 38.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001

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

Item 38.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Particulate emission limit for singular boilers or multiple boilers ducted through a common stack, which fire liquid fuels, and that have a heat capacity exceeding 250 mmBtu/hr.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 39: Compliance Certification



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Effective for entire length of Permit

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

Item 39.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001

Item 39.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a stationary combustion installation which utilizes a continuous opacity monitoring system (COMS) shall include the following in their quarterly excess emission reports:

- 1) Magnitude, date, and time of each exceedence;
- 2) For each period of excess emissions, specific identification of the cause and corrective action taken;
- 3) Date, time, and duration of each period of COMS downtime, and the corrective action for each period of downtime;
- 4) Total time the COMS is required to record data during the reporting period;
- 5) The total number of exceedences and the duration of exceedences expressed as a percentage of the total time in which the COMS are required to record data; and
- 6) Such other requirements as the Department may deem necessary in order to enforce Article 19 of the Environmental Conservation Law (ECL).

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 40: Compliance Certification
Effective for entire length of Permit

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Applicable Federal Requirement: 40CFR 60.116b(b), NSPS Subpart Kb

Item 40.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of each storage vessel as specified in 40 CFR 60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the storage vessel.

Each storage vessel with a design capacity less than 75 cubic meters is subject to no provisions of 40 CFR 60 Subpart Kb other than those required by the above paragraph

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 41: Multiple combustion sources.
Effective for entire length of Permit**

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

Item 41.1:

This Condition applies to Emission Unit: U-C0001 Emission Point: C0001

Item 41.2:

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

**Condition 42: Compliance Certification
Effective for entire length of Permit**



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Applicable Federal Requirement: 6NYCRR 227-1.3

Item 42.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 42.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

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

Compliance with the opacity stand may be determined by:

(1) evaluating the continuous opacity monitoring system (COMS) records and reports; and/or considering any other credible evidence;

(2) The COMS shall be operated according to the manufactures instructions, and properly maintain accurate instruments satisfying the criteria in Appendix B of Title 40 Part 60 of the Code of Federal Regulations (CFR).

Manufacturer Name/Model Number: ROSEMOUNT OPM 2000 OPACITY MONITOR,
SERIAL NUMBER RS94004550

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40 CFR 60 APP B, PS 1

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 43: Compliance Certification
Effective for entire length of Permit

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

Item 43.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 43.2:

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

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Condition 44: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 44.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: G14 Emission Source: B0001

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

Item 44.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate Boiler # 1 (Emission Source B0001) in compliance with applicable NYSDEC NO_x RACT Regulations:

(1) The NO_x RACT emission limitation of 0.10 lb NO_x per MMBtu may not be exceeded when firing natural gas. This is based on the stack testing conducted on May 5-17, 2003 for the NO_x RACT Compliance Plan dated July, 2003 used to comply with the requirements of NO_x RACT. The NO_x RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NO_x compliance; the flue gas Oxygen O₂ % and the steam flow in pounds per hour. Oxygen O₂ % is monitored in the exhaust as a surrogate for NO_x limit for the boiler.

The Boiler NO_x RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this

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permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.1-2), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for natural gas as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boiler B0001. Curve 5.2.1-2 can be found in Appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-1-2 as controlling algorithm for NO_x. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-1-2 for NO_x



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Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: 40 CFR 60 App B PS3
Monitoring Frequency: CONTINUOUS
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 45: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 45.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: G14 Emission Source: B0002

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

Item 45.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 2 (Emission Source B0002) in compliance with
applicable NYSDEC NO_x RACT Regulations:

(1) The NO_x RACT emission limitation of 0.10 lb NO_x per
MMBtu may not be exceeded when firing natural gas. This
is based on the stack testing conducted on May 5-17, 2003
for the NO_x RACT Compliance Plan dated July, 2003 used to
comply with the requirements of NO_x RACT. The NO_x RACT
Plan requires compliance with specific emission limits for
each boiler firing a specific fuel (0.10 pounds per
million Btus when firing natural gas and 0.30 pounds per
million Btus when firing # 6 fuel oil). In this stack
test, two parameters were monitored for NO_x compliance;
the flue gas Oxygen O₂ % and the steam flow in pounds per
hour. Oxygen O₂ % is monitored in the exhaust as a
surrogate for NO_x limit for the boiler.



The Boiler NO_x RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.2-2), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for natural gas as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boiler B0002. Curve 5.2.2-2 can be found in Appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-2-2 as controlling algorithm for NO_x. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to



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be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve
5.2.-2-2 for NOx

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 46: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 46.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: G14 Emission Source: B0003

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

Item 46.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 3 (Emission Source B0003) in compliance with
applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.10 lb NOx per
MMBtu may not be exceeded when firing natural gas. This
is based on the stack testing conducted on May 5-17, 2003
for the NOx RACT Compliance Plan dated July, 2003 used to



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comply with the requirements of NO_x RACT. The NO_x RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NO_x compliance; the flue gas Oxygen O₂ % and the steam flow in pounds per hour. Oxygen O₂ % is monitored in the exhaust as a surrogate for NO_x limit for the boiler.

The Boiler NO_x RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.3-2), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for natural gas as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boiler B0003. Curve 5.2.3-2 can be found in Appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-3-2 as controlling algorithm for NO_x. The control system is



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complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve
5.2.-3-2 for NO_x

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 47: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 47.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: G14 Emission Source: B0004

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

Item 47.2:

Compliance Certification shall include the following monitoring:

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

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Monitoring Description:

At all times, Mount Sinai Medical Center is to operate Boiler # 4 (Emission Source B0004) in compliance with applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.10 lb NOx per MMBtu may not be exceeded when firing natural gas. This is based on the stack testing conducted on May 5-17, 2003 for the NOx RACT Compliance Plan dated July, 2003 used to comply with the requirements of NOx RACT. The NOx RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NOx compliance; the flue gas Oxygen O2 % and the steam flow in pounds per hour. Oxygen O2 % is monitored in the exhaust as a surrogate for NOx limit for the boiler.

The Boiler NOx RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O2 vs. Steam Flow Load curve (Curve 5.2.4-2), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for natural gas as part of the Evaluation Report for the NOx RACT Compliance Plan for Boiler B0004. Curve 5.2.4-2 can be found in Appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into



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the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-4-2 as controlling algorithm for NOx. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O2 in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O2 content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-4-2 for NOx

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 48: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 48.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: G56 Emission Source: B0005

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Regulated Contaminant(s):

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

Item 48.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate Boiler # 5 (Emission Source B0005) in compliance with applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.10 lb NOx per MMBtu may not be exceeded when firing natural gas. This is based on the stack testing conducted on May 5-17, 2003 for the NOx RACT Compliance Plan dated July, 2003 used to comply with the requirements of NOx RACT. The NOx RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NOx compliance; the flue gas Oxygen O2 % and the steam flow in pounds per hour. Oxygen O2 % is monitored in the exhaust as a surrogate for NOx limit for the boiler.

The Boiler NOx RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O2 vs. Steam Flow Load curve (Curve 5.2.5-2), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for natural gas as part of the Evaluation Report for the NOx RACT



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Compliance Plan for Boiler B0005. Curve 5.2.5-2 can be found in Appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-5-2 as controlling algorithm for NOx. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O2 in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O2 content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-5-2 for NOx

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 49: Compliance Certification



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Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 49.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: G56 Emission Source: B0006

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

Item 49.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 6 (Emission Source B0006) in compliance with
applicable NYSDEC NO_x RACT Regulations:

(1) The NO_x RACT emission limitation of 0.10 lb NO_x per
MMBtu may not be exceeded when firing natural gas. This
is based on the stack testing conducted on May 5-17, 2003
for the NO_x RACT Compliance Plan dated July, 2003 used to
comply with the requirements of NO_x RACT. The NO_x RACT
Plan requires compliance with specific emission limits for
each boiler firing a specific fuel (0.10 pounds per
million Btus when firing natural gas and 0.30 pounds per
million Btus when firing # 6 fuel oil). In this stack
test, two parameters were monitored for NO_x compliance;
the flue gas Oxygen O₂ % and the steam flow in pounds per
hour. Oxygen O₂ % is monitored in the exhaust as a
surrogate for NO_x limit for the boiler.

The Boiler NO_x RACT Compliance Emission Evaluation Report
contains upper and lower percent oxygen limits depicted in
a series of twelve sets of curves, one curve for each of
the six boilers firing natural gas (5.2.1-2, 5.2.2-2,
5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for
each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1,
5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets
of curves can be found in Appendix A at the end of this
permit. Existing pound per hour steam load limits are
eliminated as permitted by the new NO_x RACT emission

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limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.6-2), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for natural gas as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boiler B0006. Curve 5.2.6-2 can be found in appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-6-2 as controlling algorithm for NO_x. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-6-2 for NO_x

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.10 pounds per million Btus



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Reference Test Method: 40 CFR 60 App B PS3
Monitoring Frequency: CONTINUOUS
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 3 calendar month(s).

Condition 50: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 50.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: O14 Emission Source: B0001

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

Item 50.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 1 (Emission Source B0001) in compliance with
applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.30 lb NOx per
MMBtu may not be exceeded when firing residual oil (number
6 fuel oil). This is based on the stack testing conducted
on May 5-17, 2003 for the NOx RACT Compliance Plan dated
July, 2003 used to comply with the requirements of NOx
RACT. The NOx RACT Plan requires compliance with specific
emission limits for each boiler firing a specific fuel
(0.10 pounds per million Btus when firing natural gas and
0.30 pounds per million Btus when firing # 6 fuel oil).
In this stack test, two parameters were monitored for NOx
compliance; the flue gas Oxygen O2 % and the steam flow in
pounds per hour. Oxygen O2 % is monitored in the exhaust
as a surrogate for NOx limit for the boiler.

The Boiler NOx RACT Compliance Emission Evaluation Report

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contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.1-1), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for residual oil as part of the Evaluation Report for the NOx RACT Compliance Plan for Boiler B0001. Curve 5.2.1-1 can be found in Appendix A at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-1-1 as controlling algorithm for NOx. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer

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upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve
5.2.-1-1 for NOx

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 51: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 51.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: O14 Emission Source: B0002

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

Item 51.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 2 (Emission Source B0002) in compliance with
applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.30 lb NOx per
MMBtu may not be exceeded when firing residual oil (number
6 fuel oil). This is based on the stack testing conducted
on May 5-17, 2003 for the NOx RACT Compliance Plan dated
July, 2003 used to comply with the requirements of NOx
RACT. The NOx RACT Plan requires compliance with specific

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emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NOx compliance; the flue gas Oxygen O2 % and the steam flow in pounds per hour. Oxygen O2 % is monitored in the exhaust as a surrogate for NOx limit for the boiler.

The Boiler NOx RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O2 vs. Steam Flow Load curve (Curve 5.2.2-1), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for residual oil as part of the Evaluation Report for the NOx RACT Compliance Plan for Boiler B0002. Curve 5.2.2-1 can be found at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-2-1 as controlling algorithm for NOx. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O2 in flue gas and boiler steam flow rate. An automated combustion control system



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maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve
5.2.-2-1 for NO_x

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 52: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 52.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001

Process: O14 Emission Source: B0003

Regulated Contaminant(s):

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

Item 52.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 3 (Emission Source B0003) in compliance with

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applicable NYSDEC NO_x RACT Regulations:

(1) The NO_x RACT emission limitation of 0.30 lb NO_x per MMBtu may not be exceeded when firing residual oil (number 6 fuel oil). This is based on the stack testing conducted on May 5-17, 2003 for the NO_x RACT Compliance Plan dated July, 2003 used to comply with the requirements of NO_x RACT. The NO_x RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NO_x compliance; the flue gas Oxygen O₂ % and the steam flow in pounds per hour. Oxygen O₂ % is monitored in the exhaust as a surrogate for NO_x limit for the boiler.

The Boiler NO_x RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.3-1), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for residual oil as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boiler B0003. Curve 5.2.3-1 can be found at the end of the permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler

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operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-3-1 as controlling algorithm for NO_x. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-3-1 for NO_x

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 53: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: O14 Emission Source: B0004

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

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Item 53.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate Boiler # 4 (Emission Source B0004) in compliance with applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.30 lb NOx per MMBtu may not be exceeded when firing residual oil (number 6 fuel oil). This is based on the stack testing conducted on May 5-17, 2003 for the NOx RACT Compliance Plan dated July, 2003 used to comply with the requirements of NOx RACT. The NOx RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NOx compliance; the flue gas Oxygen O2 % and the steam flow in pounds per hour. Oxygen O2 % is monitored in the exhaust as a surrogate for NOx limit for the boiler.

The Boiler NOx RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O2 vs. Steam Flow Load curve (Curve 5.2.4-1), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for residual oil as part of the Evaluation Report for the NOx RACT Compliance Plan for Boiler B0004. Curve 5.2.4-1 can be found at the end of this permit together with the other eleven sets of curves for the six boilers.

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The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-4-1 as controlling algorithm for NOx. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O2 in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O2 content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-4-1 for NOx

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 54: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 54.1:



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The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: O56 Emission Source: B0005

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

Item 54.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate Boiler # 5 (Emission Source B0005) in compliance with applicable NYSDEC NOx RACT Regulations:

(1) The NOx RACT emission limitation of 0.30 lb NOx per MMBtu may not be exceeded when firing residual oil (number 6 fuel oil). This is based on the stack testing conducted on May 5-17, 2003 for the NOx RACT Compliance Plan dated July, 2003 used to comply with the requirements of NOx RACT. The NOx RACT Plan requires compliance with specific emission limits for each boiler firing a specific fuel (0.10 pounds per million Btus when firing natural gas and 0.30 pounds per million Btus when firing # 6 fuel oil). In this stack test, two parameters were monitored for NOx compliance; the flue gas Oxygen O2 % and the steam flow in pounds per hour. Oxygen O2 % is monitored in the exhaust as a surrogate for NOx limit for the boiler.

The Boiler NOx RACT Compliance Emission Evaluation Report contains upper and lower percent oxygen limits depicted in a series of twelve sets of curves, one curve for each of the six boilers firing natural gas (5.2.1-2, 5.2.2-2, 5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1, 5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NOx RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O2 vs. Steam Flow Load curve (Curve 5.2.5-1),

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developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for residual oil as part of the Evaluation Report for the NOx RACT Compliance Plan for Boiler B0005. Curve 5.2.5-1 can be found at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NOx RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-5-1 as controlling algorithm for NOx. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O2 in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O2 content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-5-1 for NOx

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.



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

Condition 55: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(c)(2)

Item 55.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-C0001 Emission Point: C0001
Process: O56 Emission Source: B0006

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

Item 55.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

At all times, Mount Sinai Medical Center is to operate
Boiler # 6 (Emission Source B0006) in compliance with
applicable NYSDEC NO_x RACT Regulations:

(1) The NO_x RACT emission limitation of 0.30 lb NO_x per
MMBtu may not be exceeded when firing residual oil (number
6 fuel oil). This is based on the stack testing conducted
on May 5-17, 2003 for the NO_x RACT Compliance Plan dated
July, 2003 used to comply with the requirements of NO_x
RACT. The NO_x RACT Plan requires compliance with specific
emission limits for each boiler firing a specific fuel
(0.10 pounds per million Btus when firing natural gas and
0.30 pounds per million Btus when firing # 6 fuel oil).
In this stack test, two parameters were monitored for NO_x
compliance; the flue gas Oxygen O₂ % and the steam flow in
pounds per hour. Oxygen O₂ % is monitored in the exhaust
as a surrogate for NO_x limit for the boiler.

The Boiler NO_x RACT Compliance Emission Evaluation Report
contains upper and lower percent oxygen limits depicted in
a series of twelve sets of curves, one curve for each of
the six boilers firing natural gas (5.2.1-2, 5.2.2-2,
5.2.3-2, 5.2.4-2, 5.2.5-2 and 5.2.6-2), and one curve for
each boiler firing residual fuel oil (5.2.1-1, 5.2.2-1,
5.2.3-1, 5.2.4-1, 5.2.5-1 and 5.2.6-1). All twelve sets

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of curves can be found in Appendix A at the end of this permit. Existing pound per hour steam load limits are eliminated as permitted by the new NO_x RACT emission limitations presented in Curves 5.2.1-2 thru 5.2.6-2 and 5.2.1-1 thru 5.2.6-1.

At all times, the boiler will be operated according to the Plant Oxygen O₂ vs. Steam Flow Load curve (Curve 5.2.6-1), developed during the May 5-17, 2003 stack testing and reported on June 20, 2003 to the Department, to demonstrate compliance with the above limit for residual oil as part of the Evaluation Report for the NO_x RACT Compliance Plan for Boiler B0006. Curve 5.2.6-1 can be found at the end of this permit together with the other eleven sets of curves for the six boilers.

The new compliance curves of the surrogate flue gas percent oxygen are a function of the boiler steam load. During the transition period, algorithms for the newly developed NO_x RACT curves were developed and inserted into the DCS controls. Additionally, the DCS was modified to provide boiler operators indication of surrogate parameters on a real time basis, alarms and methods of control. A training session was provided to the boiler operators specific to this matter.

The facility utilizes current Westinghouse combustion management process controls with compliance curve 5.2.-6-1 as controlling algorithm for NO_x. The control system is complete with graphics representing real time monitoring and hourly averaging of percent O₂ in flue gas and boiler steam flow rate. An automated combustion control system maintains the proper exit oxygen levels by modulating air registers according to boiler load.

(2) The steam flow and flue gas oxygen O₂ content are to be continuously recorded on individual circular charts for each boiler. All boiler operating charts and logs are to be kept on site and be made available or copied for immediate inspection by any NYSDEC inspector or engineer upon request.

(3) Semi-annually, the compliance status of this condition shall be reported to the Department.

Manufacturer Name/Model Number: Westinghouse Combustion Process Controls w/Curve 5.2.-6-1 for NO_x



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Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.30 pounds per million Btus

Reference Test Method: 40 CFR 60 App B PS3

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 3 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 56: Contaminant List
Effective for entire length of Permit**

Applicable State Requirement: ECL 19-0301

Item 56.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this



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permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY075-00-0

Name: PARTICULATES

CAS No: 007446-09-5

Name: SULFUR DIOXIDE

CAS No: 0NY998-00-0

Name: VOC

**Condition 57: Unavoidable noncompliance and violations
Effective for entire length of Permit**

Applicable State Requirement: 6NYCRR 201-1.4

Item 57.1:

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.



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(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 58: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement: 6NYCRR 201-5.3(b)

Item 58.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 58.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Any reports or submissions required in this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept of Environmental Conservation
Region 2
47-40 21st Street
Long Island City, NY 11101

Monitoring Frequency: SEMI-ANNUALLY

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 59: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement: 6NYCRR 211.2



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Item 59.1:

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

Condition 60: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement: 6NYCRR 211.2

Item 60.1:

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.