



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

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 9-1464-00116/02002  
Effective Date: 07/12/2010                      Expiration Date: No expiration date

Permit Issued To: TOWN OF TONAWANDA  
2919 DELAWARE AVE  
BUFFALO, NY 14217-2308

Contact: KENNETH F MAVING  
TONAWANDA (T) STP #2  
779 TWO MILE CREEK RD  
TONAWANDA, NY 14150  
(716) 693-4900

Facility: TONAWANDA SD#2 STP  
750 TWO MILE CREEK RD  
TONAWANDA, NY 14150

Description:

This State Facility Permit is for the operation of two municipal sewage sludge incinerators. The two incinerators are identical 5 hearth units rated at 2000 dry lbs/hour and process centrifuge conditioned sludge. The facility process includes activated sludge and sand filters. Hydrocarbon emissions are destroyed in the zero hearth of the furnace which is similar to an afterburner. Particulate emissions are controlled by venturi-slot scrubbers. Typically only one incinerator is used at any one time. The facility incinerated 4918 dry metric tons of sludge in 2008. Tonawanda STP also has a 2 MW emergency standby diesel generator burning low sulfur fuel. The upgrade from belt presses to centrifuge technology to dewater sludge significantly improves operation and reduces fuel requirements.

One of the two identical incinerators was stack tested in October of 1990 for metals to determine compliance with 40 CFR part 503 and in April of 1992 to determine compliance with particulate limits in 40 cfr part 60 subpart O. The metals emissions easily meet the requirements of 40 cfr part 503 and meet Air Guide 1 guidelines using today's concentration of metals in sludge and treating the control equipment as Best Available Control Technology (BACT). The equipment can be considered BACT for metals at time of installation. The particulate emission results in 1992 were 0.62 lb/dry ton of sludge feed which is well below the 1.3 lb/ton limit. Emissions below 0.75 lb/ton have less reporting requirements as stated in NSPS subpart O.



The requirements of 40 CFR Part 503, a Clean Water Act regulation, are included with the DEC permit conditions.

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:           DAVID S DENK  
  DIVISION OF ENVIRONMENTAL PERMITS  
  270 MICHIGAN AVE  
  BUFFALO, NY 14203-2999

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_



**Notification of Other State Permittee Obligations**

**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

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

**Item B: Permittee's Contractors to Comply with Permit**

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

**Item C: Permittee Responsible for Obtaining Other Required Permits**

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

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

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



**LIST OF CONDITIONS**

**DEC GENERAL CONDITIONS**

**General Provisions**

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

**Facility Level**

- Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS
  - Total Hydrocarbon Continuous Emission Monitor Requirement
  - Operating Combustion Temperature
- Frequency of monitoring arsenic, cadmium, chromium, lead, and nickel in sewage sludge.
- Reporting and Recordkeeping Requirements



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

**Condition 1: Facility Inspection by the Department**

**Applicable State Requirement: ECL 19-0305**

**Item 1.1:**

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

**Item 1.2:**

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

**Item 1.3:**

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

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

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

**Item 2.1:**

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

**Condition 3: Applications for permit renewals, modifications and transfers**

**Applicable State Requirement: 6 NYCRR 621.11**

**Item 3.1:**

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

**Item 3.2:**

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

**Item 3.3:**

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



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

**Item 4.1:**

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

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

**\*\*\*\* Facility Level \*\*\*\***

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

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:  
NYSDEC Regional Permit Administrator  
Region 9 Headquarters  
Division of Environmental Permits  
270 Michigan Avenue  
Buffalo, NY 14203-2915  
(716) 851-7165

**Condition 6: Total Hydrocarbon Continuous Emission Monitor Requirement**  
**Applicable State Requirement: 40 CFR 503.44**

**Item 6.1:**

Total Hydrocarbons in the exit gas from a sewage sludge incinerator stack must be continuously measured and recorded using a flame ionization detection instrument referenced to propane unless a Carbon Monoxide monitor is used per the requirements of 40cfr 503.40(c). The instrument shall be installed, calibrated, operated, and maintained per manufacturers specifications; shall have a heated sampling line maintained at a temperature of 150 degrees Celsius or higher at all times; and shall be calibrated at least once every 24-hour operating period using propane.

An instrument that continuously measures and records the oxygen concentration in the sewage sludge incinerator stack exit gas shall be installed calibrated, operated, and maintained per manufacturers specifications.

An instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas shall be installed calibrated, operated, and maintained per manufacturers specifications.



An instrument that continuously measures and records combustion temperatures shall be installed, calibrated, operated, and maintained per manufacturers specifications.

The monthly average concentration for total hydrocarbons in the exit gas from a sewage sludge incinerator stack, corrected for zero percent moisture using the correction factor from equation (7) and to seven percent oxygen using the correction factor from equation (8), shall not exceed 100 parts per million on a volumetric basis when measured using the instrument required by section 503.45(a). (Equations 7 and 8 are in section 503.45. Any deviations shall be reported annually.

**Condition 7: Operating Combustion Temperature**  
**Applicable State Requirement: 40 CFR 503.45**

**Item 7.1:**

Operation of a sewage sludge incinerator shall not cause the operating combustion temperature for the sewage sludge incinerator to exceed the performance test combustion temperature by more than 20 percent. An instrument that continuously measures and records combustion temperatures shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator. Any deviations to this condition shall be reported annually.

**Condition 8: Frequency of monitoring arsenic, cadmium, chromium, lead, and nickel in sewage sludge.**  
**Applicable State Requirement: 40 CFR 503.46**

**Item 8.1:**

Frequency of monitoring for arsenic, cadmium, chromium, lead, and nickel in sewage sludge fed to a sewage sludge incinerator shall be the frequency in table 1 of 40 CFR 503.46.

Equal or greater than 1,500 metric tons per 365 day period, (dry weight basis) but less than 15,000, sample sludge once per 60 days ( six times per year). Reports summarizing results due by February 19 of each year.

After the sewage sludge has been monitored for two years at the specified frequency, the permitting authority may reduce the frequency of monitoring arsenic, cadmium, chromium, lead, and nickel.

**Condition 9: Reporting and Recordkeeping Requirements**  
**Applicable State Requirement: 40 CFR 503.48**

**Item 9.1:**

Record-keeping

The person who fires sewage sludge in an incinerator shall develop the following information and shall retain this information for five years.

- 1) The concentration of lead, arsenic, cadmium, chromium, and nickel in the sewage sludge fed to the incinerator.
- 2) The total hydrocarbons concentrations in the exit gas from the sewage sludge incinerator.
- 3) Information that indicates the requirements in the National Emission Standard for beryllium in subpart C of 40 cfr part 61 are met.
- 4) Information that indicates the requirements in the National Emission Standards for mercury in subpart E of 40 cfr part 61 are met.
- 5) The operating combustion temperatures for the sewage sludge incinerator.
- 6) Values for the air pollution control device operating parameters.



- 7) The oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack.
- 8) The sewage sludge feed rate.
- 9) The stack height for the sewage sludge incinerator.
- 10) The dispersion factor for the site where the sewage sludge incinerator is located.
- 11) The control efficiency for lead, arsenic, cadmium, chromium, and nickel for each sewage sludge incinerator.
- 12) The risk specific concentration for chromium calculated using equation(6), if applicable.
- 13) A calibration and maintenance log for the instruments used to measure the total hydrocarbons concentration and oxygen concentration in the exit gas from the sewage sludge incinerator stack, the information needed to determine moisture content in in the exit gas , and the combustion temperatures.

**Reporting.**

Class 1 sludge management facilities, POTWs ( as defined in 40 cfr 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people of greater shall submit the information to the USEPA region 2 office and the Regional NYSDEC office by February 19 of each year.



**New York State Department of Environmental Conservation**

Permit ID: 9-1464-00116/02002

Facility DEC ID: 9146400116



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

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

**IDENTIFICATION INFORMATION**

Permit Issued To: TOWN OF TONAWANDA  
2919 DELAWARE AVE  
BUFFALO, NY 14217-2308

Facility: TONAWANDA SD#2 STP  
750 TWO MILE CREEK RD  
TONAWANDA, NY 14150

Authorized Activity By Standard Industrial Classification Code:  
4952 - SEWERAGE SYSTEMS

Permit Effective Date: 07/12/2010  
date.

Permit Expiration Date: No expiration  
date.



**LIST OF CONDITIONS**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Emission Unit Level**

**EU>--INCIN**

- 1 40CFR 60.152(a)(1), NSPS Subpart O: Compliance Demonstration
- 2 40CFR 60.152(a)(2), NSPS Subpart O: Compliance Demonstration
- 3 40CFR 60.153(a)(1), NSPS Subpart O: Compliance Demonstration
- 4 40CFR 60.153(a)(2), NSPS Subpart O: Access to sludge charged for sampling
- 5 40CFR 60.153(b)(1), NSPS Subpart O: Compliance Demonstration
- 6 40CFR 60.153(b)(2), NSPS Subpart O: Compliance Demonstration
- 7 40CFR 60.153(b)(3), NSPS Subpart O: Compliance Demonstration
- 8 40CFR 60.153(b)(4), NSPS Subpart O: Compliance Demonstration
- 10 40CFR 60.153(c)(3), NSPS Subpart O: Compliance Demonstration
- 9 40CFR 61.32(a), NESHAP Subpart C: Compliance Demonstration

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 11 ECL 19-0301: Contaminant List
- 12 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 13 6 NYCRR Subpart 201-5: Emission Unit Definition
- 14 6 NYCRR 211.2: Air pollution prohibited

**Emission Unit Level**

- 15 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 16 6 NYCRR Subpart 201-5: Process Definition By Emission Unit



**FEDERALLY ENFORCEABLE CONDITIONS**  
**\*\*\*\* Emission Unit Level \*\*\*\***

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

**Item A: Sealing - 6 NYCRR 200.5**

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

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

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

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

**Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6**

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

**Item C: Maintenance of Equipment - 6 NYCRR 200.7**

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



required to operate such device effectively.

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

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

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

**Item E: Emergency Defense - 6 NYCRR 201-1.5**

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

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

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

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



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

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

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

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

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

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

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

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

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

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



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

**Item K: Visible Emissions Limited - 6 NYCRR 211.3**

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.

**Item L: Open Fires Prohibitions - 6 NYCRR 215.2**

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

**Item M: 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 N: Federally Enforceable Requirements - 40 CFR 70.6 (b)**

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state



regulations.

**FEDERAL APPLICABLE REQUIREMENTS**  
**The following conditions are federally enforceable.**

**Condition 1: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.152(a)(1), NSPS Subpart O**

**Item 1.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

**Item 1.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

§ 60.152 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator of any sewage sludge incinerator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere of:

(1) Particulate matter at a rate in excess of 0.65 g/kg dry sludge input (1.30 lb/ton dry sludge input)

Parameter Monitored: PARTICULATES

Upper Permit Limit: 1.30 pounds per ton

Reference Test Method: EPA approved methods

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2011.

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

**Condition 2: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.152(a)(2), NSPS Subpart O**

**Item 2.1:**

The Compliance Demonstration activity will be performed for:



Emission Unit: --INCIN

**Item 2.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

- § 60.152 Standard for particulate matter.
- (a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator of any sewage sludge incinerator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere of:
- (2) Any gases which exhibit 20 percent opacity or greater.

Parameter Monitored: OPACITY  
Upper Permit Limit: 20 percent  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2011.  
Subsequent reports are due every 6 calendar month(s).

**Condition 3: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.153(a)(1), NSPS Subpart O**

**Item 3.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**Item 3.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

- § 60.153 Monitoring of operations.
- (a) The owner or operator of any sludge incinerator subject to the provisions of this subpart shall:
- (1) Install, calibrate, maintain, and operate a flow measuring device which can be used to determine either the mass or volume of sludge charged to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range. Except as provided in paragraph (d) of this section, the flow measuring device shall be operated



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continuously and data recorded during all periods of operation of the incinerator.

Parameter Monitored: VOLUME  
Upper Permit Limit: 24 dry tons per day  
Monitoring Frequency: CONTINUOUS  
Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED RANGE AT ANY TIME  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2011.  
Subsequent reports are due every 6 calendar month(s).

**Condition 4: Access to sludge charged for sampling**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.153(a)(2), NSPS Subpart O**

**Item 4.1:**  
This Condition applies to Emission Unit: --INCIN

**Item 4.2:**  
**§ 60.153 Monitoring of operations.**

**(a) The owner or operator of any sludge incinerator subject to the provisions of this subpart shall:**

**(2) Provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained.**

**Condition 5: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.153(b)(1), NSPS Subpart O**

**Item 5.1:**  
The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**Item 5.2:**  
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

For incinerators equipped with a wet scrubbing device, install, calibrate, maintain and operate a monitoring device that continuously measures and records the pressure drop of the gas flow through the wet scrubbing device. Where a combination of wet scrubbers is used in series, the pressure drop of the gas flow through the combined



system shall be continuously monitored. The device used to monitor scrubber pressure drop shall be certified by the manufacturer to be accurate within  $\pm 250$  pascals ( $\pm 1$  inch water gauge) and shall be calibrated on an annual basis in accordance with the manufacturer's instructions.

The operator shall submit to the USEPA Administrator and Regional NYSDEC office semiannually a report that contains the following:

For incinerators that achieved an average particulate matter emission rate of 0.75 lb/ton dry sludge input or less during the most recent performance test a report of average scrubber pressure drop measurements for each period of 15 minutes duration or more during which the pressure drop of the scrubber was less than 30 percent from the average scrubber pressure drop measured during the recent performance test.

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 20 inches of water

Monitoring Frequency: CONTINUOUS

Averaging Method: 15-MINUTE RUNNING LIMIT

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 0 days after the reporting period.

The initial report is due 12/31/2010.

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

**Condition 6: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement: 40CFR 60.153(b)(2), NSPS Subpart O**

**Item 6.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**Item 6.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Install, calibrate, maintain and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet into the incinerator exhaust gas stream, fan, ambient air recirculation damper, or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy



of  $\pm 5$  percent over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period.

The operator shall submit to the USEPA Administrator and NYSDEC Regional office semiannually a report in writing which contains the following:

A record of average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more that the oxygen content of the incinerator exhaust gas exceeds the average oxygen content measured during the recent performance test by more than 3 percent.

Parameter Monitored: OXYGEN CONTENT

Upper Permit Limit: 11 percent

Monitoring Frequency: CONTINUOUS

Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2011.

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

**Condition 7: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement: 40CFR 60.153(b)(3), NSPS Subpart O**

**Item 7.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**Item 7.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

60.153 (b) The owner or operator of any multiple hearth, fluidized bed, or electric sludge incinerator subject to the provisions of this subpart shall comply with the requirements of paragraph (a) of this section and:

(3) Install, calibrate, maintain and operate temperature measuring devices at every hearth in multiple hearth furnaces; in the bed and outlet of fluidized bed incinerators; and in the drying, combustion, and cooling zones of electric incinerators. For multiple hearth furnaces, a minimum of one thermocouple shall be installed



in each hearth in the cooling and drying zones, and a minimum of two thermocouples shall be installed in each hearth in the combustion zone. For electric incinerators, a minimum of one thermocouple shall be installed in the drying zone and one in the cooling zone, and a minimum of two thermocouples shall be installed in the combustion zone. Each temperature measuring device shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range. Except as provided in paragraph (d) of this section, the temperature monitoring devices shall be operated continuously and data recorded during all periods of operation of the incinerator.

Parameter Monitored: TEMPERATURE

Upper Permit Limit: 1700 degrees Fahrenheit

Monitoring Frequency: CONTINUOUS

Averaging Method: 1-HOUR MAXIMUM - NOT TO BE EXCEEDED  
MORE THAN ONCE PER CALENDAR YEAR

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2011.

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

**Condition 8: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement: 40CFR 60.153(b)(4), NSPS Subpart O**

**Item 8.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**Item 8.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

60.153 (b) The owner or operator of any multiple hearth, fluidized bed, or electric sludge incinerator subject to the provisions of this subpart shall comply with the requirements of paragraph (a) of this section and:

(4) Install, calibrate, maintain and operate a device for measuring the fuel flow to the incinerator. The flow measuring device shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range. Except as provided in paragraph (d) of the section, the fuel flow measuring device shall be operated continuously and data recorded during all periods of operation of the incinerator.

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Monitoring Frequency: CONTINUOUS  
Averaging Method: 8-HOUR BLOCK - ARITHMETIC MEAN  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2011.  
Subsequent reports are due every 12 calendar month(s).

**Condition 10: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 60.153(c)(3), NSPS Subpart O**

**Item 10.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**Item 10.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

60.153 (c) The owner or operator of any multiple hearth, fluidized bed, or electric sludge incinerator subject to the provisions of this subpart shall retain the following information and make it available for inspection by the Administrator for a minimum of 2 years:

(3) A record of the rate of sludge charged to the incinerator, the measured temperatures of the incinerator, the fuel flow to the incinerator, and the total solids and volatile solids content of the sludge charged to the incinerator, as required by paragraphs (a)(1), (b)(3), (b)(4), and (b)(5) of this section.

Monitoring Frequency: CONTINUOUS  
Averaging Method: 1-HOUR AVERAGE  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2011.  
Subsequent reports are due every 12 calendar month(s).

**Condition 9: Compliance Demonstration**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable Federal Requirement:40CFR 61.32(a), NESHAP Subpart C**

**Item 9.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: --INCIN

**New York State Department of Environmental Conservation**

**Permit ID: 9-1464-00116/02002**

**Facility DEC ID: 9146400116**



Regulated Contaminant(s):

CAS No: 007440-41-7      BERYLLIUM

**Item 9.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in an 24 hour period. Where emissions depend upon the relative frequency of operation of different types of process, operating hours, operating capacities, or other factors, the calculation of maximum 24 hour period emissions will be based on that combination of factors which is likely to occur during the subject period and which result in the maximum emissions.

Parameter Monitored: CONCENTRATION

Upper Permit Limit: 10 grams per day

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: 24 HOUR DAILY AVERAGE (ARITHMETIC  
MEAN)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2011.

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



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

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

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

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

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

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

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

**STATE ONLY APPLICABLE REQUIREMENTS**

**The following conditions are state only enforceable.**



**Condition 11: Contaminant List**

**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable State Requirement:ECL 19-0301**

**Item 11.1:**

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

CAS No: 007440-41-7

Name: BERYLLIUM

CAS No: 0NY075-00-0

Name: PARTICULATES

**Condition 12: Unavoidable noncompliance and violations**

**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR 201-1.4**

**Item 12.1:**

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

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those





above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

**Condition 13: Emission Unit Definition**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 13.1:**

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

Emission Unit: --INCIN

Emission Unit Description:

Two identical, five hearth unit, sludge incinerators used for the combustion of municipal sewage sludge. The incinerators process activated sludge, centrifuged to 28% solids. Emissions are controlled by venturi-slot scrubbers.

Building(s): incin

**Condition 14: Air pollution prohibited**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR 211.2**

**Item 14.1:**

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

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



**Condition 15: Emission Point Definition By Emission Unit**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 15.1:**

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

Emission Unit: --INCIN

Emission Point: I001A

Height (ft.): 33

Diameter (in.): 28

NYTMN (km.): 4767.6

NYTME (km.): 182.9

Building: incin

Emission Point: I002A

Height (ft.): 33

Diameter (in.): 28

NYTMN (km.): 4767.6

NYTME (km.): 182.9

Building: incin

**Condition 16: Process Definition By Emission Unit**  
**Effective between the dates of 07/12/2010 and Permit Expiration Date**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 16.1:**

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

Emission Unit: --INCIN

Process: 001

Source Classification Code: 5-03-005-15

Process Description:

Sewage sludge is fed into one of two identical multiple hearth incinerators after being conditioned in a centrifuge. The incinerators are fueled by natural gas. Each furnace has four hearths, plus a zero hearth (afterburner) and is equipped with its own venturi-slot gas scrubbing system. Ash is moved by a screw conveyor, to a bucket elevator, then a pug mill and finally to a dumpster for removal offsite. This process typically operates five days per week, 24 hours per day. Only one of two incinerators is in operation at a time.

Emission Source/Control: NCIN3 - Control

Control Type: VENTURI SCRUBBER

Emission Source/Control: NCIN4 - Control

Control Type: VENTURI SCRUBBER

Emission Source/Control: NCIN1 - Incinerator

Design Capacity: 2,000 pounds per hour

Waste Feed Method: CHUTE FED

Waste Type: SEWAGE SLUDGE

**New York State Department of Environmental Conservation**  
Permit ID: 9-1464-00116/02002      Facility DEC ID: 9146400116



Emission Source/Control: NCIN2 - Incinerator  
Design Capacity: 2,000 pounds per hour  
Waste Feed Method: CHUTE FED  
Waste Type: SEWAGE SLUDGE

