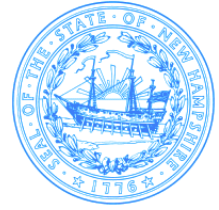




The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

August 28, 2023

Frederick McNeil, Chief Engineer
City of Manchester – Highway Department – EPD
300 Winston Street
Manchester, NH 03101

RE: Compliance Evaluation Report

Dear Mr. McNeil:

The New Hampshire Department of Environmental Services, Air Resources Division (NHDES) has completed a full compliance evaluation of the City of Manchester, Highway Department, Environmental Protection Division, located in Manchester, New Hampshire. The purpose of the evaluation was to determine the City of Manchester's compliance with Title V Permit to Operate No. TV-0066 and the NH Code Admin. Rules, Env-A 100 *et seq.* This is a copy of the compliance evaluation report for your review and records.

Please note that this compliance evaluation pertains only to NH Code Admin. Rules, Env-A 100 *et seq.* as they relate to your air permit. Any compliance determination made with respect to the air rules does not in any way imply compliance with any other applicable environmental rules or laws.

NHDES identified deficiencies during this compliance evaluation, as detailed in the report.

If you have any questions, please contact David Smith at (603) 271-1987 or by email at david.smith@des.nh.gov

Sincerely,

David Smith
Compliance Assessment Section Supervisor
Air Resources Division

ec: Mayor, City of Manchester, mayor@manchesternh.gov
Robert Robinson, City of Manchester, Highway Dept. – EPD, rrobinson@manchesternh.gov

Abbreviations and Acronyms

| | |
|-------------------|---|
| AAL | Ambient Air Limit |
| ANSI | American National Standards Institute |
| ASME | American Society of Mechanical Engineers |
| ASTM | American Society of Testing and Materials |
| Btu | British thermal units |
| CAA | Clean Air Act |
| CAS | Chemical Abstracts Service |
| Cd | cadmium |
| CEMS | Continuous Emission Monitoring System |
| cfm | cubic feet per minute |
| CFR | Code of Federal Regulations |
| CMS | Continuous Monitoring System |
| CO | Carbon Monoxide |
| dscm | dry standard cubic meter |
| Env-A | New Hampshire Code of Administrative Rules – Air Resources Division |
| ERT | USEPA’s Electronic Reporting Tool |
| ft ³ | cubic feet |
| gal | gallon |
| GFAAS | graphite furnace atomic absorption spectroscopy |
| HAP | Hazardous Air Pollutant (defined in Section 112 of the 1990 Clean Air Act Amendments) |
| HCl | hydrogen chloride |
| Hg | mercury |
| hp | horsepower |
| hr | hour |
| H ₂ S | hydrogen sulfide |
| ICP/MS | inductively coupled plasma mass spectrometry |
| kg | kilogram |
| kW | kilowatt |
| lb | pound |
| mg | milligram |
| MGD | million gallons per day |
| MM | million |
| ng | nanogram |
| NHDES | New Hampshire Department of Environmental Services (the Department) |
| NO _x | Oxides of Nitrogen |
| Pb | lead |
| PM | Particulate Matter |
| PM _{2.5} | Particulate Matter < 2.5 microns |
| PM ₁₀ | Particulate Matter < 10 microns |
| ppmvd | parts per million by volume, dry |
| PTC | performance test code |
| RSA | Revised Statutes Annotated |
| RTAP | Regulated Toxic Air Pollutant |
| SCADA | supervisory control and data acquisition |
| SIP | State Implementation Plan |
| SO ₂ | Sulfur Dioxide |

| | |
|-------|---|
| SPC | sorbent polymer composite |
| SSI | Sewage Sludge Incinerator |
| SSMP | Site-Specific Monitoring Plan |
| tpy | tons per consecutive 12-month period |
| USEPA | United States Environmental Protection Agency |
| VOC | volatile organic compound |
| WWTP | wastewater treatment plant |

I. Facility Description

NHDES conducted an on-site full compliance evaluation of the City of Manchester, Highway Department – EPD’s Wastewater Treatment Plant (the Facility) located at 300 Winston St, Manchester, NH, and the results are presented herein. NHDES discussed the purpose of the inspection as well as the rules pertaining to claims of confidentiality and facility safety concerns. The Facility agreed to the inspection and authorized access to the facility. Material provided and operations conducted by the Facility at the time of the evaluation were not claimed as confidential. The evaluation covers the period August 27, 2021, through August 8, 2023.

Manchester Wastewater Treatment Plant (WWTP) is a regional wastewater treatment facility, owned by the City of Manchester, Highway Department, Environmental Protection Division, that treats wastewater prior to discharging treated effluent to the Merrimack River. The wastewater treatment plant currently receives flows from Manchester, as well as the towns of Londonderry, Bedford, and Goffstown. The WWTP currently treats an average of 34 million gallons per day (MGD) of wastewater and has a design capacity of 56 MGD. In addition, sewage sludge and septage (from the member communities listed and other surrounding communities) are treated at the WWTP.

Sources of air emissions at the facility that meet the permit applicability criteria of Env-A 607.01 include the fluidized bed sewage sludge incinerator (SSI), four emergency stationary combustion turbines, and two biofilters for control of hydrogen sulfide (H₂S) from the primary clarifiers and from the first basin in each of the four aeration treatment system trains.

The Facility is a synthetic minor source for nitrogen oxides (NO_x) based on operational limitations in the permit to reduce permitted NO_x levels below 50 tpy. The Facility is a true minor source for sulfur dioxide (SO₂), particulate matter less than 10 microns (PM₁₀), carbon monoxide (CO), and volatile organic compounds (VOCs). The Facility is an area source for hazardous air pollutants (HAPs). The Facility is required to obtain a Title V operating permit as an SSI subject to the federal plan requirements in 40 CFR 62, Subpart LLL.

The Facility entered into a Consent Decree with the US EPA in November of 2018 in order to bring the facility into compliance with 40 CFR Part 62, Subpart LLL. The Facility satisfied all their obligations under the Consent Decree and has maintained continuous compliance with the Consent Decree for more than two years, and therefore the Consent Decree was terminated effective January 19, 2023.

| | |
|---------------------------|---|
| Facility Name and Address | City of Manchester – Highway Department - EPD 300 Winston St Manchester, NH 03101 |
| County | Hillsborough |
| Telephone | 603-624-6421 |
| AFS# | 3301100089 |
| Source Type | Title V |
| Inspection Date / Time | August 8, 2023 10:00 a.m. |
| Inspection Type | State On-Site Full Compliance Evaluation |
| Inspection Period | August 27, 2021 – August 8, 2023 |
| Weather | 60 degrees, intermittent rain, mild winds |
| Inspected by | David Smith, Senior Compliance Assessment Engineer |
| Source Contact(s) | Frederick McNeill, Chief Engineer Robert Robinson, Plant Superintendent |

| | |
|---|---------------------------------|
| | David St Armand, Chief Operator |
| Last Inspection | August 26, 2021 |
| Results from the last inspection are as follows: | |
| <ul style="list-style-type: none"> MWWTP submitted a single excursion of the minimum SSI freeboard temperature which occurred on June 19, 2021 | |

The table below lists the permitting timeline and the effective periods of each permit / application covering the evaluation period.

| Permitting / Application Timeline | | | |
|-----------------------------------|---------|---------|--------------|
| Permit | TV-0066 | Issued | June 2, 2021 |
| | | Expires | May 31, 2026 |

II. Emission Unit Identification

Table 1 lists the permitted emissions units for the facility from Title V Operating Permit TV-0066, as verified by NHDES.

| Table 1 - Significant Activities | | | |
|----------------------------------|---|-------------------|---|
| Emission Unit ID | Description of Emission Unit | Installation Date | Maximum Design/Permitted Capacity |
| EU01 | Fluidized Bed Sewage Sludge Incinerator Zimpro Model Fluidized Bed Incinerator | 1994 | 3500 dry lbs/hr sludge and 110 dry lbs/hr scum (equivalent to 7.22 wet tons/hr) 4 Primary burners: 4.5 MMBtu/hr each, equivalent to 32 gal/hr of #2 fuel oil each. Secondary burner: 8 MMBtu/hr, equivalent to 57 gal/hr of #2 fuel oil or 131 ft ³ /min of natural gas. |
| EU04 | Emergency Generator #2 (G2) Solar (Harvester) Turbine GEI-SA-EM S428717 | April 1976 | 12.6 MMBtu/hr (900 kW; 1,207 hp) #2 fuel oil – equivalent to 90 gal/hr |
| EU05 | Emergency Generator #3 (G3) Solar (Harvester) Turbine GEI-SA-EM S428718 | April 1976 | 12.6 MMBtu/hr (900 kW; 1,207 hp) #2 fuel oil – equivalent to 90 gal/hr |
| EU06 | Emergency Generator #4 Crescent Road Pump Station (G4) Solar (Harvester) Turbine | April 1976 | 12.6 MMBtu/hr (900 kW; 1,207 hp) #2 fuel oil – equivalent to 90 gal/hr |

| Table 1 - Significant Activities | | | |
|----------------------------------|---|-------------------|---|
| Emission Unit ID | Description of Emission Unit | Installation Date | Maximum Design/Permitted Capacity |
| | GSE-1000 S431098 | | |
| EU07 | Emergency Generator #5 Crescent Road Pump Station (G5) Solar (Harvester) Turbine GSE-1000 S431099 | April 1976 | 12.6 MMBtu/hr (900 kW; 1,207 hp) #2 fuel oil – equivalent to 90 gal/hr |
| EU08 | The first basin in each of 4 aeration treatment system trains (anoxic/anaerobic zones) | 1976 | 42 MGD of wastewater |
| EU09 | Primary Clarifiers | 1976 | 72 MGD of wastewater |

The table below lists the facility-wide reported emissions for the review period.

| Year | Particulate Matter (tpy) | Sulfur Dioxide (tpy) | Nitrogen Oxides (tpy) | Carbon Monoxide (tpy) | NMVOCs (tpy) | Non-VOC HAPs/RTAPs | Total Emissions (tpy) |
|--------|--------------------------|----------------------|-----------------------|-----------------------|--------------|--------------------|-----------------------|
| Limits | --- | --- | 50 | --- | --- | --- | N/A |
| 2022 | 0.24 | 0.06 | 12.82 | 1.08 | 1.64 | 0.40 | 16.26 |
| 2021 | 0.24 | 0.07 | 13.19 | 1.12 | 1.83 | 0.43 | 16.90 |

III. Stack Criteria

Table 2 lists the stack associated with the permitted emission units from Title V Operating Permit TV-0066 and requires that the stack be vertical and unobstructed, as verified by NHDES during the inspection.

| Table 2 – Stack Criteria | | | |
|--------------------------|------------------|--|------------------------------|
| Stack # | Emission Unit ID | Minimum Height (feet above ground surface) | Maximum Exit Diameter (feet) |
| Stack 1 | EU01 | 121.5 | 1.67 |

IV. Air Pollution Control Unit Identification

Table 3, taken from TV-0066 lists the air pollution control devices that shall be operated at all times when the associated device is operating in order to meet permit conditions, as verified by NHDES during the inspection.

| Table 3 – Pollution Control Equipment Identification | | | |
|--|--|---|--------------------------|
| Pollution Control Equipment ID | Description | Purpose | Emission Unit Controlled |
| PCE01 | Biofilter 50' x 150' 22,000 cfm | Control of H ₂ S | EU08 |
| PCE02 | Biofilter 50' x 150' 22,000 cfm | Control of H ₂ S | EU09 |
| PCE03 | Venturi Scrubber | Control of particulate matter (PM), cadmium (Cd) and lead (Pb) emissions | EU01 |
| PCE04 | Impingement Tray Scrubber | Control PM, Cd, Pb, SO ₂ and hydrogen chloride (HCl) emissions | EU01 |
| PCE05 | Gore/ECI Sorbent Polymer Composite (SPC) | Control of mercury (Hg) | EU01 |

V. Compliance with Operating and Emission Limits

Table 4, below taken from permit TV-0066 lists the State-only Operating and Emission Limitations for the facility and any deficiencies noted during the evaluation.

| Table 4 – State Requirement Enforceable Operational and Emission Limitations | | | | |
|--|---|--------------------------|------------------|--------------|
| Item # | Applicable Requirements | Applicable Emission Unit | Regulatory Basis | Compliant |
| 1. | 24-hour and Annual Ambient Air Limit The emissions of any Regulated Toxic Air Pollutant (RTAP) shall not cause an exceedance of its associated 24-hour or annual Ambient Air Limit (AAL) as set forth in Env-A 1450.01, <i>Table of All Regulated Toxic Air Pollutants</i> . | Facility wide | Env-A 1400 | Yes |
| 2. | RTAP Operating Limitations Emissions of H ₂ S from wastewater treatment operations shall be controlled using biofilters as specified in Table 3 to maintain compliance with the associated 24-hour and annual AALs as set forth in Env-A 1450.01, <i>Table of All Regulated Toxic Air Pollutants</i> . | EU08 & EU09 | Env-A 1400 | Yes |
| 3. | Revisions of the List of RTAPs In accordance with RSA 125-I:5 IV, if the Department revises the list of RTAPs or their respective AALs or classifications in RSA 125 I:4, II and III, and as a result of such revision the Owner or Operator is | Facility wide | Env-A 1404.02 | Noted |

| | | | | |
|---|---|----------------|------------------|-----|
| | required to obtain or modify the Permit under the provisions of RSA 125-I or RSA 125-C, the Owner or Operator shall have 90 days following publication of notice of such final revision in the New Hampshire Rulemaking Register to file a complete application for such Permit or Permit modification. | | | |
| Finding: The Facility was not required to modify its permit as a result of the February 3, 2022 revision of the list of RTAPs. | | | | |
| 4. | Sulfur Limits of No. 2 Fuel Oil Sulfur content of the No. 2 oil shall not exceed 0.0015% by weight. | EU01,EU04-EU07 | Env-A 1603.03 | Yes |

Table 5, below taken from permit TV-0066 lists the federally enforceable Operating and Emission Limitations for the facility and any deficiencies noted during the evaluation.

| Table 5 – Federally Enforceable Operational and Emission Limitations | | | | |
|---|---|---------------------------------|--|------------------|
| Item # | Applicable Requirement | Applicable Emission Unit | Regulatory Basis | Compliant |
| 1. | Facility Wide NOx Emission Limitation The total NOx emissions from the Facility shall not exceed 50 tons during any consecutive 12-month period. | EU01 & EU04-EU09 | TP-C-0084 | Yes |
| 2. | Operating Limitations SSI – Maximum Allowable Sludge Feed Rate Incineration of sludge and scum combined shall be limited to the following: a. The sludge feed rate shall be limited to less than or equal to 6.2 wet tons per hour of sludge and scum combined; and b. 44,330 wet tons per 12-consecutive month period of sludge and scum combined; or c. If the most recent successful performance test, performed pursuant to 40 CFR Part 62.16015, was conducted at less than 85% of 6.2 wet tons per hour sludge and scum combined, then throughput will be limited to 110% of the average feed rate, in wet tons per hour measured during the test, from the time of the test until a following successful test is conducted. | EU01 | TP-0248 & 40 CFR Part §62.16015 | Yes |
| Findings: The Facility demonstrates compliance using c. above. The most recent stack test conducted in December 2020 was performed at 4.42 wet tons per hour (wtph), which is less than 85% of 6.2 wtph. Therefore, the current throughput limit is set to 110% of 4.42 wtph, or 4.86 wtph. The Facility is in compliance with this limit. | | | | |
| 3. | Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970 The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20% for any continuous 6-minute period. | EU04-EU07 | Env-A 2002.02 (formerly Env-A 1202 effective 12-27-90) | Unknown |
| Findings: EU04 – EU07 were not in operation during the inspection; therefore, opacity could not be determined. | | | | |

Table 5 – Federally Enforceable Operational and Emission Limitations

| Item # | Applicable Requirement | Applicable Emission Unit | Regulatory Basis | Compliant | | | | |
|--|---|--------------------------|--|-----------|------------|------|--|-----|
| 4. | <p>Particulate Emission Standards for Fuel Burning Devices Installed After May 13, 1970, but before January 1, 1985</p> <p>The PM emissions from fuel burning devices installed after May 13, 1970, but before January 1, 1985 shall not exceed 0.57 lb/MMBtu.</p> | EU04-EU07 | Env-A 2003.02 (formerly Env-A 1202 effective 12-27-90) | Yes | | | | |
| <p>Findings: Compliance with particulate emission standards is verified through stack testing, which has not been required for these devices, to date. However, at the time the permit was issued, NHDES had sufficient information to indicate that under normal operating conditions, these devices are capable of meeting the particulate matter standard.</p> | | | | | | | | |
| 5. | <p>Visible Emission Standards</p> <p>The average opacity shall not exceed 20% for any continuous 6-minute period.</p> | EU08 and EU09 | Env-A 2103.02 | Yes | | | | |
| 6. | <p>Emergency Generator</p> <p>Each emergency generator shall be limited to 120 hours of operation during any consecutive 12-month period.</p> | EU04 – EU07 | FS-S-0240 | Yes | | | | |
| 7. | <p>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Standard for Particulate Matter</p> <p>The sewage sludge incinerator shall be limited to:</p> <ol style="list-style-type: none"> Particulate matter emissions of 0.65 g/kg dry sludge input (1.30 lb/ton dry sludge input); and Opacity shall not exceed 20 percent for any continuous 6-minute period. | EU01 | 40 CFR 60 Subpart O §60.152 | Yes | | | | |
| <p>Findings: Stack testing was most recently conducted on EU01 December 15 – 18, 2020. The results of the stack testing demonstrated compliance with the above limit.</p> | | | | | | | | |
| 8. | <p>40 CFR 61, Subpart C - National Emission Standard for Beryllium</p> <p>Emissions from the sewage sludge incinerator shall not exceed 10 grams (0.022 lb) of beryllium over a 24-hour period.</p> | EU01 | 40 CFR 61 Subpart C §61.32 | Yes | | | | |
| 9. | <p>40 CFR 61, Subpart E - National Emission Standard for Mercury</p> <p>Emissions from the sewage sludge incinerator shall not exceed 3.2 kg (7.1 lb) of mercury per 24-hour period.</p> | EU01 | 40 CFR 61 Subpart E §61.52(b) | Yes | | | | |
| 10. | <p>SSI Emission Limits</p> <p>The following emission limits must be met at all times the unit is operating including periods of startup, shutdown and malfunction.</p> <table border="1" data-bbox="207 1780 950 1864"> <thead> <tr> <th>Pollutant</th> <th>Limit (Corrected to 7%O₂)</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>18 mg/dscm</td> </tr> </tbody> </table> | Pollutant | Limit (Corrected to 7%O ₂) | PM | 18 mg/dscm | EU01 | 40 CFR Part 62 Subpart LLL §62.15955 Table 2 & §62.15970 | Yes |
| Pollutant | Limit (Corrected to 7%O ₂) | | | | | | | |
| PM | 18 mg/dscm | | | | | | | |

Table 5 – Federally Enforceable Operational and Emission Limitations

| Item # | Applicable Requirement | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|-------------------------------------|--|------------------|-----------|
| | HCl | 0.51 ppmvd | | |
| | CO | 64 ppmvd | | |
| | Dioxins/Furans | 1.2 ng/dscm (total mass) or 0.10 ng/dscm (toxic equivalency) | | |
| | Hg | 0.037 mg/dscm | | |
| | NOx | 150 ppmvd | | |
| | SO ₂ | 15 ppmvd | | |
| | Cd | 0.0016 mg/dscm | | |
| | Pb | 0.0074 mg/dscm | | |
| | Visible emissions from ash handling | <5% of any compliance test hourly observation period | | |

Findings: Stack testing was most recently conducted on EU01 December 15 – 18, 2020. The results of the stack testing demonstrated compliance with the above limit.

| | | | | |
|-----|--|------|--|--------------|
| 11. | <p>Operating Limits for SSI Controls</p> <p>a. The following operating limits and requirements, as established during the most recent compliant <i>Performance Test</i>, must be met at all times sewage sludge is in the combustion chamber:</p> <ol style="list-style-type: none"> 1. Minimum SSI freeboard temperature; 2. Maximum SSI freeboard temperature; 3. Minimum pressure drop across venturi scrubber; 4. Minimum pressure drop across the tray scrubber; 5. Minimum total venturi scrubber liquid flow rate; 6. Minimum total tray scrubber liquid flow rate; and 7. Minimum scrubber liquid pH, upper and lower tray; <p>b. The following operating limits and requirements from the <i>Site-Specific Monitoring Plan (SSMP)</i> must be met at all times sewage sludge is in the combustion chamber:</p> <ol style="list-style-type: none"> 1. The inlet temperature to the mercury control system is no greater than 180 °F on a 12-hour block average (calendar day); 2. The pressure drop across the mercury control system is no greater than 4 inches of water column on a 12-hour block average (calendar day); 3. As measured on a quarterly basis, the mercury removal across the mercury control system is no less than 70% when the outlet concentration of mercury is greater than 0.03 mg/m³. | EU01 | 40 CFR Part 62 Subpart LLL §62.15960 | See Findings |
|-----|--|------|--|--------------|

Table 5 – Federally Enforceable Operational and Emission Limitations

| Item # | Applicable Requirement | Applicable Emission Unit | Regulatory Basis | Compliant |
|---|--|--------------------------|--|------------|
| | c. The following requirement from the SSMP must be met at all times: <ol style="list-style-type: none"> 1. Ash from the SSI will be maintained in a totally enclosed and/or wet handling system. | | | |
| <p>Findings: The Facility submitted timely notification of excursions from the minimum SSI freeboard temp which occurred on January 22, 2022, October 13, 2022, and June 19, 2023. It submitted timely notification of an excursion from the minimum scrubber liquid pH on the lower tray which occurred on October 7, 2013, and noted the causes and length of the excursions and took corrective action to bring the process back within operating limits.</p> | | | | |
| 12. | <p>Continuous Monitoring System (CMS) The Owner or Operator shall:</p> <ol style="list-style-type: none"> a. Install, operate, calibrate and maintain the CMS according to the SSMP; b. Collect data at all times the SSI is operating and at the intervals specified in the monitoring plan except for periods of monitoring malfunctions, repairs to address malfunctions or required quality assurance or quality control activities; c. Report any deviations from monitoring requirements for periods when data is not collected, other than during a monitoring system malfunction, in a deviation report; and d. Omit data recorded during malfunctions, associated repairs, and required quality assurance and control activities from calculations used to report emissions or operating levels. | EU01, PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.16020 | Yes |
| 13. | <p>Operator Training and Qualification</p> <ol style="list-style-type: none"> a. The SSI unit must be operated by a fully trained and qualified SSI unit operator or someone supervised by a trained operator. A trained operator must be at the Facility or able to reach the Facility within 1 hour; b. Operator training must be obtained through a state-approved program or a course that includes the following: <ol style="list-style-type: none"> 1. Training on the 10 subjects below: <ol style="list-style-type: none"> i. Environmental concerns including types of emissions; ii. Basic combustion principles, including products of combustion; iii. Operation of the specific type of incinerator in use, including proper startup, sewage sludge feeding and shutdown procedures; iv. Combustion controls and monitoring; v. Operation of air pollution controls and factors affecting performance; vi. Inspection and maintenance of the incinerator and air pollution control devices; | EU01 | 40 CFR Part 62 Subpart LLL §62.15920, §62.15925, §62.15935 & §62.15940 | Yes |

Table 5 – Federally Enforceable Operational and Emission Limitations

| Item # | Applicable Requirement | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|--|--------------------------|--------------------------------------|--------------|
| | <ul style="list-style-type: none"> vii. Actions to prevent malfunctions or to prevent conditions leading to malfunctions; viii. Bottom and fly ash characteristics and handling procedures; ix. Applicable federal, state and local regulations including OSHA workplace standards; and x. Pollution prevention. <ul style="list-style-type: none"> 2. An examination on the topics above designed and administered by the state-approved program or instructor administering the training; 3. Written material covering the training topics that may serve as reference materials after course completion. <p>c. Operator training must be completed by the final compliance date or within 6 months after the employee assumes responsibilities to operate or supervise SSI operation, whichever is later;</p> <p>d. Operators must complete an annual review or refresher course including, at a minimum, the following topics:</p> <ul style="list-style-type: none"> 1. Update of regulations; 2. Incinerator operation, including startup and shutdown procedures, sewage sludge feeding and ash handling; 3. Inspection and maintenance; 4. Prevention of malfunctions or conditions that may lead to malfunction; and 5. Discussion of operating problems encountered by attendees. <p>e. Lapsed operator qualifications may be renewed by:</p> <ul style="list-style-type: none"> 1. Completing a standard annual refresher for a lapse less than 3 years; or 2. Repeating the initial operator training for a lapse over 3 years. | | | |
| 14. | <p><i>Temporary Non-accessibility of Qualified Operators</i></p> <p>a. If a qualified operator cannot be at the Facility within 1 hour, the SSI unit may be operated for less than 2 weeks by other plant personnel who are familiar with SSI operation and have completed an annual review of training information when a qualified operator is not accessible for more than 8 hours. A record must be made of the period of non-accessibility of a qualified operator and reported as a deviation in the Annual Compliance Report;</p> | EU01 | 40 CFR Part 62 Subpart LLL §62.15945 | Noted |

| Table 5 – Federally Enforceable Operational and Emission Limitations | | | | |
|---|--|--------------------------|------------------|-----------|
| Item # | Applicable Requirement | Applicable Emission Unit | Regulatory Basis | Compliant |
| | b. In cases where a qualified operator is not accessible for 2 weeks or more, follow <i>Qualified Operator Deviation</i> reporting requirements in Table 8. | | | |
| Findings: During the evaluation period, there were no cases where a qualified operator was not onsite. | | | | |
| 15. | Permit Deviations In the event of a permit deviation, the Owner or Operator of the affected device, process, or air pollution control equipment shall investigate and take corrective action immediately upon discovery of the permit deviation to restore the affected device, process, or air pollution control equipment to within allowable permit levels. | EU01, EU08-EU09 | Env-A 911.03 | Yes |

VI. Compliance with Monitoring and Testing Requirements

Table 6, below taken from permit TV-0066 lists the Monitoring and Testing Requirements for the facility and any deficiencies noted during the evaluation.

| Table 6 – Monitoring and Test Requirements | | | | | | |
|---|--------------------------------|---|---|--------------------------|-------------------------------|-----------|
| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
| 1. | To Be Determined | When conditions warrant, the Department may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Department approved methods. | Upon request by the Department | Facility wide | RSA 125-C:6, XI | Noted |
| Findings: NHDES did not require stack testing during this evaluation period. | | | | | | |
| 2. | Sulfur Content of Liquid Fuels | Conduct testing in accordance with appropriate ASTM test methods or retain documentation in accordance with Table 7, Item 5 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels. | For each delivery of fuel oil to the Facility | Facility wide | Env-A 806.02 and Env-A 806.05 | Yes |
| 3. | Monitoring of Air Pollution | The control equipment shall be maintained in good working order and, at a minimum, the Owner or Operator shall maintain, monitor and operate the | As noted | PCE01, PCE02 | 40 CFR 70.6(a)(3) | Yes |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant | | | | | | | | | | | | | | | |
|--------------------|--|---|--|------------------------------|--|--------------------|--|--------------|-------------------|--|-----|----|--|----------------|--------------------|--|----|--|--|--|--|
| | Control Equipment | biofilters as described in the site-specific <i>Air Pollution Control Monitoring Plan</i> submitted with permit application 14-0141 and updated in accordance with Table 8, Item 17. | | | | | | | | | | | | | | | | | | | |
| 4. | Performance Test Methods | Conduct a <i>Performance Test</i> to demonstrate compliance with <i>SSI Emission Limits</i> using the averaging methods, sampling volumes, and methods below, or any alternative method approved by the Department in accordance with Env-A 809. Major alternatives to test methods must be approved by USEPA Region 1. | 11-13 months after previous test or no more than 37 months after previous test if using criteria in Table 6, Item 9; or to establish new operating limits; or 60 days after process change | EU01 | 40 CFR Part 62 Subpart LLL §62.15980 & §62.15985 | Yes | | | | | | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging/ Sample volumes</th> <th>Test Methods</th> </tr> </thead> <tbody> <tr> <td>Particulate Matter</td> <td>3-run average Minimum (Min) volume of 1 dscm/run</td> <td>5, 26A or 29</td> </tr> <tr> <td>Hydrogen Chloride</td> <td>3-run average Min volume of 1 dscm/run</td> <td>26A</td> </tr> <tr> <td>CO</td> <td>3-run average Min volume of 1 dscm/run</td> <td>10, 10A or 10B</td> </tr> <tr> <td>Dioxins/ Furans</td> <td>3-run average Min volume of 1 dscm/run</td> <td>23</td> </tr> </tbody> </table> | Pollutant | Averaging/ Sample volumes | Test Methods | Particulate Matter | 3-run average Minimum (Min) volume of 1 dscm/run | 5, 26A or 29 | Hydrogen Chloride | 3-run average Min volume of 1 dscm/run | 26A | CO | 3-run average Min volume of 1 dscm/run | 10, 10A or 10B | Dioxins/ Furans | 3-run average Min volume of 1 dscm/run | 23 | | | | |
| Pollutant | Averaging/ Sample volumes | Test Methods | | | | | | | | | | | | | | | | | | | |
| Particulate Matter | 3-run average Minimum (Min) volume of 1 dscm/run | 5, 26A or 29 | | | | | | | | | | | | | | | | | | | |
| Hydrogen Chloride | 3-run average Min volume of 1 dscm/run | 26A | | | | | | | | | | | | | | | | | | | |
| CO | 3-run average Min volume of 1 dscm/run | 10, 10A or 10B | | | | | | | | | | | | | | | | | | | |
| Dioxins/ Furans | 3-run average Min volume of 1 dscm/run | 23 | | | | | | | | | | | | | | | | | | | |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|---------------------|--|------------------------------------|-----------|---------------------------|---------|-----------------|---|--|----|---|---|----|---|-------------------------------------|---------------------------------|----|--|--|--|--|
| | | <table border="1"> <tr> <td>Hg</td> <td>3-run average Method 29: Min volume of 1 dscm/run Method 30B: refer to 40 CFR Part 60 App A-8</td> <td>29, 30B or ASTM D6784- 02</td> </tr> <tr> <td>NOx</td> <td>3-run average 1 hr Min</td> <td>7 or 7E</td> </tr> <tr> <td>SO₂</td> <td>3-run average Method 6: Min volume of 60 L/run Method 6C: 1 hr/run</td> <td>6 or 6C or ANSI/ ASME PTC- 9.10- 1981</td> </tr> <tr> <td>Cd</td> <td>3-run average Min volume of 1 dscm/run</td> <td rowspan="2">29 + GFAAS or ICP/MS for analytical finish</td> </tr> <tr> <td>Pb</td> <td>3-run average Min volume of 1 dscm/run</td> </tr> <tr> <td>Visible Emissions from ash handling</td> <td>Three, 1-hr observation periods</td> <td>22</td> </tr> </table> | Hg | 3-run average Method 29: Min volume of 1 dscm/run Method 30B: refer to 40 CFR Part 60 App A-8 | 29, 30B or ASTM D6784- 02 | NOx | 3-run average 1 hr Min | 7 or 7E | SO ₂ | 3-run average Method 6: Min volume of 60 L/run Method 6C: 1 hr/run | 6 or 6C or ANSI/ ASME PTC- 9.10- 1981 | Cd | 3-run average Min volume of 1 dscm/run | 29 + GFAAS or ICP/MS for analytical finish | Pb | 3-run average Min volume of 1 dscm/run | Visible Emissions from ash handling | Three, 1-hr observation periods | 22 | | | | |
| Hg | 3-run average Method 29: Min volume of 1 dscm/run Method 30B: refer to 40 CFR Part 60 App A-8 | 29, 30B or ASTM D6784- 02 | | | | | | | | | | | | | | | | | | | | | |
| NOx | 3-run average 1 hr Min | 7 or 7E | | | | | | | | | | | | | | | | | | | | | |
| SO ₂ | 3-run average Method 6: Min volume of 60 L/run Method 6C: 1 hr/run | 6 or 6C or ANSI/ ASME PTC- 9.10- 1981 | | | | | | | | | | | | | | | | | | | | | |
| Cd | 3-run average Min volume of 1 dscm/run | 29 + GFAAS or ICP/MS for analytical finish | | | | | | | | | | | | | | | | | | | | | |
| Pb | 3-run average Min volume of 1 dscm/run | | | | | | | | | | | | | | | | | | | | | | |
| Visible Emissions from ash handling | Three, 1-hr observation periods | 22 | | | | | | | | | | | | | | | | | | | | | |

Findings: The Facility conducted an initial stack test after installation of mercury controls on August 21st and 22nd of 2019 and a subsequent test on December 15-18, 2020. The 2019 and 2020 tests establish that the emissions were less than 75% of all Subpart LLL emission limits for two consecutive years and there have been no changes to the system that could increase emissions. Therefore, the next performance test may be scheduled to be conducted no later than 37 months after the performance test completed on December 18, 2020, which is no later than January 18, 2024.

| | | | | | | |
|----|-------------------------------|---|--|-------------------|--|-----|
| 5. | Establishing Operating Limits | During the most recent compliant <i>Performance Test</i> , establish site-specific operating limits for the following using the recording frequencies and data averaging periods specified under <i>SSI Controls Monitoring</i> : | Most recent compliant performance test | EU01, PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.15980 & §62.15985 | Yes |
|----|-------------------------------|---|--|-------------------|--|-----|

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|--------------------------------|---|--|--------------------------|--|-----------|
| | | a. Minimum SSI freeboard temperature equal to the lowest 4-hour average measured; b. Maximum SSI freeboard temperature equal to the highest 4-hour average measured; c. Minimum pressure drop across the venturi scrubber equal to the lowest 4-hour average measured; d. Minimum pressure drop across the tray scrubber equal to the lowest 4-hour average measured; e. Minimum total venturi scrubber liquid flow rates equal to the lowest 4-hour average measured; f. Minimum total tray scrubber liquid flow rates equal to the lowest 4-hour average measured; and g. Minimum scrubber liquid pH, both upper and lower tray, equal to the lowest 1-hour average measured. | | | | |
| 6. | Performance Test Notifications | Compliance testing shall be planned and carried out in accordance with the following: a. The Facility must notify the Department at least 30 days prior to conducting a <i>Performance Test</i> ; b. A pre-test protocol shall be submitted to the Department at least 30 days prior to the commencement of testing; c. The Owner or Operator and any contractor retained by the Owner or Operator to conduct the test shall meet with a Department representative at least 15 days prior to the test date to finalize the details of the testing; d. A pre-test meeting may be held less than 15 days prior to the test so long as the Department staff are available | 30 days prior to performance testing or as specified | EU04 | 40 CFR Part 62 Subpart LLL §62.16015 & §61.16000 & Env-A 802 | Yes |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|------------------|---|-----------------------|--------------------------|--|-----------|
| | | <p>and implementation of any testing or operation changes resulting from the meeting can be carried out prior to scheduled test date and scheduled test integrity is not jeopardized;</p> <p>e. Notify the Department as soon as possible, but no later than 7 days, and obtain approval from the Department prior to any proposed changes in the testing schedule for a compliance stack test;</p> <p>f. The Owner or Operator shall obtain prior approval from the Department, which shall be based on staff availability, of any new date for a compliance stack test; and</p> <p>g. If a force majeure that may cause or causes a delay in testing occurs or has occurred, the Owner or Operator must notify the Department in writing as soon as practicable. Provide a description of the event, reason for delay, actions to minimize delay, and identify date for proposed performance tests.</p> | | | | |
| 7. | Performance Test | <p>Each performance test shall conform to the procedures specified below:</p> <p>a. The general requirements of 40 CFR §60.8;</p> <p>b. All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations and at least 85% of maximum permitted capacity;</p> | Each Performance Test | EU01 | 40 CFR Part 62 Subpart LLL §62.16015 | Yes |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|-----------|---|---------------------|--------------------------|------------------|-----------|
| | | <p>c. Documentation of dry sludge burned during the performance test must include:</p> <ol style="list-style-type: none"> 1. Continuous monitoring and records of the hourly rate of sewage sludge fed to the incinerator; and 2. A log of moisture content of the sewage sludge burned during the test by taking a grab sample for each 8-hour period that testing is conducted; <p>d. All performance tests must be conducted using methods, sampling volumes and observation periods according to 40 CFR Part 62 Subpart LLL;</p> <p>e. Sample location and traverse points must be selected using Method 1 in 40 CFR Part 60, Appendix A at locations representative of actual operating emissions;</p> <p>f. Gas composition and oxygen concentrations must be measured using Method 3A or 3B in 40 CFR Part 60, Appendix A-2 simultaneously with each method;</p> <p>g. All pollutant concentrations must be adjusted to 7% oxygen using the following equation:</p> $C_{adj} = C_{meas} \times \frac{(20.9 - 7)}{(20.9 - \%O_2)}$ <p>Where: C_{adj} = pollutant concentration adjusted to 7% O₂</p> | | | | |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|---|--|-----------------------|--------------------------|------------------------|-----------|
| | | <p>C_{meas} = pollutant concentration measured on a dry basis $(20.9 - 7) = 20.9\% O_2 - 7\% O_2$ (defined oxygen correction basis) 20.9 = O_2 concentration in air, percent; and $\%O_2$ = oxygen concentration measured on a dry basis, percent</p> | | | | |
| 8. | Performance Test Data and Alternative Methods | <p>a. The Owner or Operator shall provide calibration data for any sampling equipment used during the compliance stack testing to the Department upon request during the day of testing;</p> <p>b. The Owner or Operator shall provide copies of all calibration and field test data taken during the testing, including failed runs, to the Department upon request;</p> <p>c. The Department shall approve minor deviations from the agreed-upon test method or pre-test protocol only if the following criteria are met:</p> <ol style="list-style-type: none"> 1. The Owner or Operator informs Department personnel assigned to the stack test of the following: <ol style="list-style-type: none"> i. The deviation from the testing method or planned operational mode of the source; ii. The reason(s) for the deviation; and iii. The implications of such a deviation; 2. The Owner or Operator provides technical justification showing that allowance of such deviation will not affect the accuracy of the compliance stack emissions test. | Each Performance Test | EU01 | Env-A 802 | Yes |
| 9. | Performance Test | Performance test frequency for a particular pollutant may be reduced to no | As specified | EU01 | 40 CFR Part 62 Subpart | Noted |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--|-------------------------------|---|---|--------------------------|---|-----------|
| | Frequency Reduction | more than 37 months after the previous test if: <ol style="list-style-type: none"> a. Emissions for the pollutant are at or below 75% of the emission limit specified in SSI Emission Limits for at least 2 consecutive years and there are no process changes that may increase emissions; b. A performance test shows emissions exceed 75% of the emission limit for a pollutant, then annual testing must be conducted for that pollutant until all tests over 2 consecutive years show compliance. | | | LLL §62.16000 | |
| Findings: The Facility is aware of this option. | | | | | | |
| 10. | Site-Specific Monitoring Plan | Develop and submit to the Department for approval a <i>SSMP</i> , which will also serve as the Air Pollution Control Equipment Monitoring Plan required by Env-A 810, for each CMS. The plan must address: <ol style="list-style-type: none"> a. Installation of the continuous monitoring system sampling probe or other interface such that the measurement is representative of the exhaust emissions after controls; b. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems; c. For flow monitoring systems, requirements include: <ol style="list-style-type: none"> 1. Installation of the flow sensor in a position that provides representative flow; | After any changes in monitoring procedures or operating processes | EU01, PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.15995 & Env-A 810.01 | Yes |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|-----------|---|---------------------|--------------------------|------------------|-----------|
| | | <ul style="list-style-type: none"> 2. Use of a flow sensor with a measurement sensitivity no greater than 2% of the expected process flow rate; 3. Minimization of upstream and downstream disturbances; and 4. Performance evaluation of the flow monitoring system at each <i>Performance Test</i> or at least annually. d. For pressure monitoring systems, requirements include: <ul style="list-style-type: none"> 1. Installation of the pressure sensor in a position that provides representative measurement; 2. Minimization of pulsating pressure, vibration, and internal and external corrosion; 3. Use of a pressure sensor with a minimum tolerance of 1.27 cm of water or 1% of the pressure monitoring system operating range, whichever is less; 4. Daily operating day checks to ensure pressure measurements are not obstructed; and 5. Performance evaluation of the pressure monitoring system at each performance test or at least annually. If measured pressure exceeds manufacturer’s maximum pressure range, conduct a performance | | | | |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|-----------|---|---------------------|--------------------------|------------------|-----------|
| | | <p>evaluation or replace the pressure sensor as needed.</p> <p>e. For pH monitoring systems, requirements include:</p> <ol style="list-style-type: none"> 1. Installation of a pH sensor in a position that provides representative flow; 2. Ensure the sample is properly mixed and representative of fluid to be measured; 3. Performance evaluation of the pH monitoring system at least once each operating day; and 4. Performance evaluation, including 2-point calibration, of the pH monitoring system for each performance test and no less than quarterly. <p>f. For temperature measurement devices, requirements include:</p> <ol style="list-style-type: none"> 1. Installation of the temperature sensor in a position that provides a representative temperature; 2. Use of a temperature sensor with a minimum tolerance of 5°F or 1% of the temperature value, whichever is larger for a noncryogenic temperature range; and 3. Performance evaluation of the temperature measurement device for each performance test and no less than annually. | | | | |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|-------------------------|---|--------------------------------|--------------------------|---|------------|
| | | g. Ash handling system operating procedures to ensure fugitive emission limits are met. | | | | |
| 11. | SSI Controls Monitoring | Collect data continuously at all times the SSI unit is operating and: <ul style="list-style-type: none"> a. Record the combustion chamber operating temperature at least once every 15 minutes and reduce to 12-hr block average; b. Record a daily average sewage sludge feed rate for all operating hours over each 24-hour period and a daily average moisture content using at least one grab sample per day; c. Record the pressure drop across each scrubber at least every 15 minutes to calculate an hourly average and then a 12-hour block average; d. Record scrubber liquid flow rate at least every 15 minutes to calculate an hourly average and then a 12-hour block average; e. Record scrubber liquid pH at least every 15 minutes to calculate an hourly average and then a 3-hour block average; f. Record the mercury SPC inlet temperature at least once every 15 minutes and reduce to 12-hour block averages; g. Record the SPC pressure drop across the control device at least every 15 minutes and reduce to 12-hour block averages; and | As approved in the <i>SSMP</i> | EU01, PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.15960, §62.16005, §62.16020 Env-A 810.01 | Yes |

| Table 6 – Monitoring and Test Requirements | | | | | | |
|--|--------------------------------------|---|---------------------|--------------------------|------------------------------|--------------|
| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
| | | <p>h. On a quarterly basis, measure mercury removal across the mercury control system and document the results in accordance with the standard operating procedure described in the approved SSMP.</p> | | | | |
| 12. | Monitoring of Incinerator Operations | <p>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Monitoring of Operations</p> <p>The Owner or Operator of any sludge incinerators subject to 40 CFR 60, Subpart O shall:</p> <p>a. Provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained;</p> <p>b. 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. The device used to monitor scrubber pressure drop shall be certified by the manufacturer to be accurate within ± 250 Pascal (± 1 inch water gauge) and shall be calibrated on an annual basis in accordance with the manufacturer's instructions; and</p> <p>c. 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</p> | As noted | EU01 | 40 CFR 60, Subpart O §60.153 | See Findings |

Table 6 – Monitoring and Test Requirements

| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
|--|---|--|---------------------|--------------------------|------------------------------|-----------|
| | | accuracy of ±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. | | | | |
| <p>Findings: The oxygen monitoring system experienced intermittent failures July 10 – 12 and August 24 – September 22, 2021. The oxygen monitoring system also failed a calibration on May 1, 2022. See section IX for further details.</p> | | | | | | |
| 13. | Additional Monitoring of Incinerator Operations | <p>Additional Monitoring Requirements The Owner or Operator shall maintain, calibrate, and operate the following monitoring equipment on the incinerator:</p> <ul style="list-style-type: none"> a. A flow measuring device used to determine either the mass flow rate or volumetric flow rate of sludge charged into the incinerator. This device shall be certified by the manufacturer to have an accuracy of ±5% over its entire operating range; b. Temperature measuring devices shall be located in the fluidized bed freeboard and at the outlet of the fluidized bed. Each temperature measuring device shall be certified by the manufacturer to have an accuracy of ±5% over its operating range; c. A device for measuring the auxiliary fuel flow to the incinerator. The fuel flow measuring device shall be certified by the manufacturer to have an accuracy of ±5% over its operating range; and d. Continuous sampling systems shall complete a minimum of one cycle of operation which shall include sampling, analyzing, and data recording for each successive 15 minute period except for the oxygen sampling system which shall complete | As noted | EU01 | 40 CFR 60, Subpart O §60.153 | Yes |

| Table 6 – Monitoring and Test Requirements | | | | | | |
|--|-------------------------------------|--|---|--------------------------|--------------------------------------|-----------|
| Item # | Parameter | Method of Compliance | Frequency of Method | Applicable Emission Unit | Regulatory Basis | Compliant |
| | | a minimum of one cycle of operation for each successive 5 minute period. | | | | |
| 14. | Pollution Control Device Inspection | The Owner or Operator shall: a. Conduct inspection of air pollution control devices. b. Any repairs must be completed within 10 days of inspection unless written approval is obtained from the Department. | Annually – no later than 12 months from previous inspection | PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.16010 | Yes |
| 15. | Fugitive Ash Handling | Inspections for visible emissions will be conducted and documented in the following areas: a. Scrubber Blowdown Tank; b. Ash Slurry pumps; c. Pincher Valve; d. Ash Transfer Piping within the Incinerator Area; e. Ash Transfer Piping within the Tunnel; f. Ash Recirculation Piping and Transfer Point to Underground Piping; g. Point at which the Ash Transfer Piping Surfaces; and h. Lagoons. | Daily | EU01 | 40 CFR Part 62 Subpart LLL §62.15995 | Yes |

VII. Compliance with Recordkeeping Requirements

Table 7, below taken from permit TV-0066 lists the required recordkeeping for the facility and any deficiencies noted during the evaluation.

| Table 7 – Applicable Recordkeeping Requirements | | | | | |
|---|--|---------------------------------|--------------------------|---------------------------|-----------|
| Item # | Applicable Recordkeeping Requirement | Records Retention/Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| 1. | Record Retention and Availability The Owner or Operator shall retain records of all required monitoring data, recordkeeping and reporting requirements, and support information for a period of at least 5 years from the date of origination. | Retain for a minimum of 5 years | Facility wide | 40 CFR 70.6 (a)(3)(ii)(B) | Yes |

Table 7 – Applicable Recordkeeping Requirements

| Item # | Applicable Recordkeeping Requirement | Records Retention/Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|---|---|--------------------------|--------------------------------|-----------|
| 2. | <p>Additional Recordkeeping Requirements: Facility Wide Emission Limitations</p> <p>Maintain a 12 month running total of Facility wide emissions of NOx, calculated pursuant to Env-A 705.03, which shall include emissions from non-permitted devices, for the purpose of demonstrating that the total emissions of this pollutant are below the limit in Table 5, Item 1.</p> | Monthly | Facility wide | Env-906 and Env-A 604.02(a)(3) | Yes |
| 3. | <p>Additional Recordkeeping Requirements</p> <p>The Owner or Operator shall maintain records of monitoring requirements as specified in Table 6 of this Permit including:</p> <ol style="list-style-type: none"> Summary of maintenance and repair records for pollution control equipment listed in Table 3; Summary of maintenance, calibration, and repair records of the fuel oil metering devices; | Maintain on a continuous basis | EU01, PCE01-PCE05 | 40 CFR 70.6 (a)(3) | Yes |
| 4. | <p>General Recordkeeping Requirements for Combustion Devices</p> <p>For each fuel burning device at the Facility, the Owner or Operator shall keep records of fuel utilization in accordance with the following:</p> <ol style="list-style-type: none"> Type (e.g. #2 fuel oil, natural gas) and amount of fuel burned in each device, or type and amount of fuel burned in multiple devices and hours of operation of each device to be used to apportion fuel use between the multiple devices; and Hours of operation of each device. | Monthly | EU01, EU04-EU07 | Env-A 903.03 | Yes |
| 5. | <p>Liquid Fuel Oil Recordkeeping Requirements</p> <p>In lieu of sulfur testing pursuant to Table 6, Item 2, the Owner or Operator may maintain a written statement from the fuel supplier that the sulfur content of the fuel as delivered does not exceed state or federal standards for that fuel.</p> | Whenever there is a change in fuel supplier but at least annually | EU01, EU04-EU07 | Env-A 806.05 | Yes |
| 6. | <p>General Recordkeeping Requirements for Process Operations</p> <p>Maintain the following records for process operations:</p> <ol style="list-style-type: none"> Hours of operation of the incinerator; and | Monthly | EU01 | Env-A 903.02 | Yes |

Table 7 – Applicable Recordkeeping Requirements

| Item # | Applicable Recordkeeping Requirement | Records Retention/Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|---|---|--------------------------|-----------------------------------|-----------|
| | b. Amount of sludge and scum burned in the incinerator to verify the production limit in Table 5, Item 2. | | | | |
| 7. | <p>General NOx Recordkeeping Requirements</p> <p>If the actual annual NOx emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then record the following information:</p> <p>a. Identification of each fuel burning device;</p> <p>b. Operating schedule during the high ozone season (June 1 through August 31) for each fuel burning device identified in Table 7, Item 7a. above, including:</p> <ol style="list-style-type: none"> 1. Typical hours of operation per day; 2. Typical days of operation per month; 3. Type and amount of each fuel burned; 4. Design heat input rate in MMBtu/hr; 5. The following NOx emission data: <ol style="list-style-type: none"> i. Actual NOx emissions per month; ii. Typical high ozone season day NOx emissions, in pounds per day; and iii. Emission factors and the origin of the emission factors used to calculate the NOx emissions. | Maintain Data for Annual Report | EU01, EU04- EU07 | Env-A 905.02 | Yes |
| 8. | <p>Regulated Toxic Air Pollutants</p> <p>Maintain records documenting compliance with Env-A 1400. Compliance was demonstrated at the time of Permit issuance as described in the Department’s Application Review Summary for application #14-0141. The source must update the compliance demonstration using one of the methods provided in Env-A 1405 if:</p> <p>a. There is a revision to the list of RTAPs lowering the AAL or de minimis value for any RTAP emitted from the Facility;</p> <p>b. The amount of any RTAP emitted is greater than the amount that was evaluated in the Application Review Summary (e.g., use of a coating will increase);</p> | Update prior to process changes and within 90 days of each revision of Env-A 1400 | Facility wide | Env-A 902.01 State requirement | Yes |

Table 7 – Applicable Recordkeeping Requirements

| Item # | Applicable Recordkeeping Requirement | Records Retention/ Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|--|---|--------------------------|---|-----------|
| | c. An RTAP that was not evaluated in the Application Review Summary will be emitted (e.g., a new coating will be used); or d. Stack conditions (e.g., air flow rate) change. | | | | |
| 9. | <p>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Recordkeeping</p> <p>The Owner or Operator of any fluidized bed incinerator subject to 40 CFR 60, Subpart O shall retain the following information and make it available for inspection by the Administrator for a minimum of 5 years:</p> <p>a. For incinerators equipped with a wet scrubbing device, a record of the measured pressure drop of the gas flow through the wet scrubbing device, as required in Table 6, Item 12.b.; and</p> <p>b. A record of the measured oxygen content of the incinerator exhaust gas, as required in Table 6, Item 12.c .</p> | As noted | EU01 | 40 CFR 60, Subpart O §60.153(c) and 40 CFR 70.6 (a)(3)(ii)(B) | Yes |
| 10. | <p>General Recordkeeping Requirements for SSIs</p> <p>The Owner or Operator of a SSI shall maintain the following records for at least 5 years:</p> <p>a. Final control plan and any additional notifications;</p> <p>b. Operator training procedures, training records, and documentation of periods of Operator non-accessibility;</p> <p>c. Air pollution control device inspections and associated repair records;</p> <p>d. Performance test reports with sludge feed rates and sludge moisture content during each test;</p> <p>e. Continuous monitoring data, including 1-hour average concentrations from continuous emission monitoring systems (CEMS) and 1-hour average values from CMS parameters listed in <i>SSI Controls Monitoring</i>;</p> <p>f. Deviation reports;</p> <p>g. Equipment specifications and operation and maintenance requirements;</p> | Maintain on-site or electronically for at least 5 years | EU01, PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.16025 & §62.15950 & Env-A 906 | Yes |

| Table 7 – Applicable Recordkeeping Requirements | | | | | |
|---|---|---|--------------------------|------------------|-----------|
| Item # | Applicable Recordkeeping Requirement | Records Retention/Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| | h. Inspection, calibrations and validation checks of monitoring devices; i. Monitoring plan and performance evaluations for continuous monitoring systems; and j. Records of emissions below 75% of applicable emission limits, if extending frequency of emission testing beyond annually. | | | | |
| 11. | Recordkeeping of Petition for Alternate Emission Controls The Owner or Operator shall maintain records of the Petition for Alternate Emission Controls submitted pursuant to 40 CFR Part 62 Subpart LLL §62.15965. | Maintain on-site or electronically for at least 5 years | EU01, PCE05 | Env-A 906 | Yes |
| 12. | Permit Deviation Recordkeeping Recordkeeping of deviations from Permit requirements shall be conducted in accordance with Condition XXVII of this Permit. | Maintain Up-to-date- Data | Facility wide | Env-A 911 | Yes |

VIII. Compliance with Reporting Requirements

Table 8, below taken from permit TV-0066 lists the reporting requirements for the Facility and any deficiencies noted during the evaluation.

| Table 8 – Applicable Reporting Requirements | | | | | |
|---|---|---|--------------------------|-----------------------------------|-----------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| 1. | General Reporting Requirements a. Each report shall be separately and clearly labeled with: <ol style="list-style-type: none"> 1. The name, mailing address and physical address of the source covered by the report; 2. The operating period covered by the report; 3. The permit number and condition or item number that requires the report submittal; | For each report submitted to the Department | Facility wide | Env-A 907.01 State Requirement | Yes |

Table 8 – Applicable Reporting Requirements

| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|--|---|--------------------------|--------------------|-----------|
| | <p>4. The type of report, using the name of the report as specified in the reporting condition in the permit, that is being submitted; and</p> <p>5. The date the report was prepared;</p> <p>b. An Owner or Operator who submits a report that is a revision to a previously-submitted report shall clearly identify the revised report with the information specified in Table 8, Item 1.a. above, and indicate which portions of the report have been revised;</p> <p>c. The Owner or Operator may submit more than one report with a single cover, provided the Owner or Operator clearly identifies each report being submitted using the information required in Table 8, Items 1.a. and 1.b. above, if applicable, for each report; and</p> <p>d. The Owner or Operator shall submit reports as paper documents or by electronic means.</p> | | | | |
| 2. | <p>Certification of Accuracy Statement Any report submitted to the Department and/or USEPA shall include the certification of accuracy statement in Condition XXI.B. of this Permit and shall be signed by the responsible official.</p> | As specified in Condition XXI.B. | Facility wide | 40 CFR §70.6(c)(1) | Yes |
| 3. | <p>Annual Compliance Certification Annual compliance certification shall be submitted in accordance with Condition XXI of this Permit.</p> | Annually (received by the Department no later than April 15 th of the following calendar year) | Facility wide | 40 CFR §70.6(c)(1) | Yes |
| 4. | <p>Annual Emissions Report The Owner or Operator shall submit an annual emissions report which shall include the following information:</p> <p>a. Actual calendar year emissions from the incinerator of NO_x, CO, SO₂, VOCs, HAPs (specified by individual HAP or CAS number), CO_{2e}, filterable and condensable PM, filterable</p> | Annually (received by the Department no later than April 15 th of the following year) | EU01, EU04-EU09 | Env-A 907.02 | Yes |

Table 8 – Applicable Reporting Requirements

| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|---|---|---|--------------------------|--|-----------|
| | PM10, filterable PM2.5, ammonia, lead and RTAPs (speciated by individual RTAP); b. Actual calendar year emissions from each turbine of NOx, CO, SO2, VOCs, HAPs (speciated by individual HAP or CAS number), CO2e, filterable and condensable PM, filterable PM10, filterable PM2.5, ammonia, lead and RTAPs (speciated by individual RTAP) ; c. Actual calendar year emissions of hydrogen sulfide from the primary clarifiers and aeration tanks; d. The methods used in calculating such emissions in accordance with Env-A 705.03, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i> ; and e. All information recorded in accordance with Table 7, Items 4 and 6. | | | | |
| 5. | <i>Semiannual Permit Deviation and Monitoring Report</i> The Owner or Operator shall submit a semiannual Permit deviation and monitoring report, which contains: a. Summaries of all monitoring and testing requirements contained in this Permit; and b. A summary of all Permit deviations and excursions that have occurred during the reporting period. | Semiannually received by the Department no later than July 31 st and January 31 st of each calendar year. | Facility wide | Env-A 911 and 40 CFR §70.6(a)(3)(iii)(A) | Yes |
| 6. | <i>Permit Deviation Reporting Requirements</i> Report permit deviations that cause excess emissions or continue for longer than 9 consecutive days, or monitoring parameter excursions lasting 48 hours or more in accordance with Condition XXVII.B. | As specified | EU01, EU04-EU09 | Env-A 911.04 (a), (b) and (d) | Noted |
| Findings: The Facility is aware of this requirement. | | | | | |
| 7. | <i>Monitoring Parameter Excursion</i> In the event of an excursion of any monitored parameter indicative of the performance of air pollution control equipment in Table 6 Item 11, lasting more than 48 hours in duration: | As specified | EU01, PCE03-PCE05 | Env-A 911.04(d) | Noted |

Table 8 – Applicable Reporting Requirements

| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|--|-----------|--------------------------|------------------|-----------|
| | <p>a. Notify the Department of the Permit deviation and excess emissions by telephone (603-271-1370), fax (603-271-7053), or email (pdeviations@des.nh.gov), within 24 hours of discovery of the Permit deviation, unless it is a Saturday, Sunday, or state legal holiday, in which event, the Department shall be notified on the next day which is not a Saturday, Sunday, or state legal holiday;</p> <p>b. Submit a written report of the deviation on paper or by electronic means to the Department within 10 days of discovery of the Permit deviation reported above. The report shall include all of the following information:</p> <ol style="list-style-type: none"> 1. Facility name; 2. Facility address; 3. Name of the responsible official; 4. Facility telephone number; 5. A description of the Permit deviation, including the applicable Permit number and Permit condition(s); 6. The probable cause of the Permit deviation; 7. The date and time of the discovery of the Permit deviation; 8. The actual date(s) and time(s) of the Permit deviation; 9. The duration of the Permit deviation, including the data and time that the device, process or air pollution control equipment returned to operation in compliance with an enforceable emission limitation or operating condition; 10. The specific device, process or air pollution control equipment that contributed to the Permit deviation; 11. Any corrective measures taken to address the Permit deviation; | | | | |

Findings: The Facility is aware of this requirement.

| Table 8 – Applicable Reporting Requirements | | | | | |
|---|--|---|--------------------------|---|-----------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| 8. | <p>NOx Reporting Requirements</p> <p>If the actual annual NOx emissions from all permitted devices located at the Facility are greater than or equal to 10 tpy, then include the following information with the annual emission report:</p> <p>a. A breakdown of NOx emissions reported pursuant to Table 8, Item 4 by month; and</p> <p>b. All data recorded in accordance with Table 7, Item 7.</p> | Annually (received by the Department no later than April 15 th of the following year) | EU01, EU04-EU07 | Env-A 909 | Yes |
| 9. | <p>Annual Emission Fee</p> <p>Pay annual emission fee in accordance with Condition XXIII of this Permit.</p> | Annually (received by the Department no later than May 15 th of the following year) | EU01, EU04-EU09 | Env-A 705 | Yes |
| 10. | <p>Performance Test Reporting Requirements</p> <p>a. The Owner or Operator shall submit a report to the Department and USEPA Region 1 documenting the results of the Performance Test no more than 60 days after completion of the testing. The test report shall contain the following information:</p> <ol style="list-style-type: none"> 1. All the information required for the pre-test protocol as described in Env-A 802.04 and <i>Performance Test Notifications</i>; 2. All test data; 3. All calibration data; 4. Process data agreed by the Department and the Owner or Operator to be collected; 5. All test results; and 6. A description of any discrepancies or problems that occurred during testing or sample analysis. <p>b. The Owner or Operator shall submit the report as follows:</p> <ol style="list-style-type: none"> 1. The <i>Performance Test</i> results must be submitted electronically to USEPA’s Electronic Reporting Tool(ERT) by using the Compliance and Emissions Data Reporting | No more than 60 days after completion of testing | EU01 | 40 CFR Part 62 Subpart LLL §62.16030 (h) & Env-A 802.11 | Yes |

| Table 8 – Applicable Reporting Requirements | | | | | |
|---|--|---|--------------------------|--------------------------------------|-----------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| | <p>Interface (CEDRI) that is accessed through https://cdx.epa.gov/.</p> <p>Test data must be submitted in the file format generated through the ERT Web site: http://www.epa.gov/ttn/chief/ert/index.html</p> <p>2. A paper copy of <i>Performance Test</i> results must be submitted to the Department.</p> | | | | |
| 11. | <p>Annual SSI Compliance Report</p> <p>Submit an annual compliance report to the Department and USEPA Region 1 containing the following information:</p> <ol style="list-style-type: none"> Company name, physical address and mailing address; Responsible official name, title, signature, and certification of accuracy; Date of report and beginning and ending dates of the reporting period; Results of any performance testing conducted during the reporting period; Values for each operating limit, and calculations and methods used to establish operating limits for any limits established during the <i>Performance Test</i>; Results of operating limits approved in the SSMP; The highest and lowest 24-hour average values of parameters measured via CEMS; The highest and lowest 12-hour average values of all parameters measured via CMS except pH; The highest and lowest 3-hour average values for scrubber liquid pH; If there were no emission limit, emission standard, or operating limit deviations during the reporting period, a statement there were no deviations; Results of any performance evaluations conducted on CMS; | 12 months following submission of last report | EU01 | 40 CFR Part 62 Subpart LLL §62.16030 | Yes |

Table 8 – Applicable Reporting Requirements

| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|---|---|--------------------------|--------------------------------------|-----------|
| | l. If performance tests are conducted less frequently than annually, then include: <ol style="list-style-type: none"> 1. Dates of last two performance tests 2. Results demonstrating emissions under 75% of emission limits. 3. Statement whether there have been process changes and subsequent increases to emissions; m. Documentation of periods when qualified SSI operators were unavailable for more than 8 hours, but less than 2 weeks; n. Results of annual air pollution control device inspections; o. If there were no periods when continuous monitoring malfunctioned or were out of control, include a statement that there were no periods when continuous monitoring was interrupted; p. If there were no operating training deviations, include a statement that there were no such deviations; q. If the SSMP was revised, include a copy of the revised plan. If there were no revisions, then include a statement that no revisions were made; and r. If any malfunctions occurred that caused or may have caused an emission limit exceedance, include the number, duration and description of each malfunction. Include actions taken to minimize emissions and correct malfunctions. | | | | |
| 12. | Semi-Annual Deviation Reports a. The Owner or Operator shall submit a deviation report to the Department and USEPA Region 1 if: <ol style="list-style-type: none"> 1. Any recorded operating parameter level, based on the averaging time specified in <i>SSI Controls Monitoring</i>, is above the maximum operating limit or below the minimum operating limit. | By February 1 for the reporting period of July 1 to December 31 and August 1 for the reporting period of January 1 to June 30 | EU01, PCE03-PCE05 | 40 CFR Part 62 Subpart LLL §62.16030 | Yes |

| Table 8 – Applicable Reporting Requirements | | | | | |
|---|---|-----------|--------------------------|------------------|-----------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| | <ol style="list-style-type: none"> 2. Continuous monitoring parameters recorded on a 24-hour blockaverage exceed an emission limit; 3. Visible emissions of combustion ash from the conveying system are more than 5% of any compliance test hourly observation period. 4. Performance test results deviated from SSI Emission Limits; or 5. A continuous monitoring system was out of control or had a malfunction that caused or may have caused an emission limit exceedance. <p>b. For each deviation associated with a parameter measured by a continuous monitoring system, report the following items:</p> <ol style="list-style-type: none"> 1. Company name, physical address and mailing address; 2. Responsible official name, title, signature, and certification of accuracy; 3. Calendar date and times the unit deviation from emission limits, emission standards or operating limits; 4. The averaged and recorded data for those dates; 5. Duration and cause of each deviation from emission limits, emission standards, operating limits, bypass events and corrective actions; 6. Dates, times and causes for monitor downtime incidents; and 7. A copy of the operating parameter monitoring data during each deviation and any test report that documents emission levels. <p>c. For periods when the continuous monitoring system malfunctioned or was out of control include:</p> | | | | |

| Table 8 – Applicable Reporting Requirements | | | | | |
|--|--|------------------|---------------------------------|-------------------------|------------------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| | <ol style="list-style-type: none"> 1. The date and time that each malfunction or period out of control started and stopped and type of system interruption; 2. The date, time and duration the system was inoperative; 3. The date, time and duration that each system was out of control, including start and end dates and hours and descriptions of corrective actions; 4. The date and time that each deviation started and stopped; 5. Total duration of the deviation and total duration as a percentage of total source operating time during the reporting period; 6. Total duration of monitoring system downtime during the reporting period and total duration as a percentage of total source operating time during the reporting period; 7. Identification of each parameter and pollutant monitored at the SSI; 8. Brief description of the SSI unit; 9. Brief description of continuous monitoring system; 10. The date of the latest continuous monitoring system certification or audit; and 11. A description of any changes in the continuous monitoring system, processes, or controls since the last reporting period. <p>d. For each deviation, associated with a parameter not measured with continuous monitoring include:</p> <ol style="list-style-type: none"> 1. Company name, physical address and mailing address; 2. Responsible official name, title, signature, and certification of accuracy; | | | | |

| Table 8 – Applicable Reporting Requirements | | | | | |
|--|--|---|--------------------------|--------------------------------------|-----------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| | 3. Total operating time of each affected source during reporting period; 4. Calendar dates and times of deviation from emission limits, emission standards or operating limits; 5. The averaged and recorded data for the deviation(s); and 6. Duration and cause of each deviation and corrective actions. | | | | |
| 13. | <p>Qualified Operator Deviation</p> If all qualified operators are not accessible for 2 weeks or more the Owner or Operator must submit a notification to the Department and USEPA Region 1 of deviation including: | Within 10 days of discovery of deviation and every 4 weeks after | EU01 | 40 CFR Part 62 Subpart LLL §62.16030 | Noted |
| <p>Findings: The Facility is aware of this requirement.</p> | | | | | |
| 14. | <p>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants</p> The Owner or Operator shall submit to the Department and USEPA Region 1 semi-annually, a report containing the information described below: | Semi-annually submit no later than July 31st and January 31st of each calendar year | EU01 | 40 CFR Part 60 Subpart O §60.155(a) | Yes |
| a. | The average scrubber pressure drop for each period of 15 minutes or more during which the | | | | |

Table 8 – Applicable Reporting Requirements

| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
|--------|--|---|--------------------------|---|--------------|
| | <p>pressure drop was less than the rate described below:</p> <ol style="list-style-type: none"> 1. For incinerators that measured an average of less than or equal to 0.75 lbs PM/ton dry sludge input during the most recent performance test, report pressure drop reduction of more than 30% from the average scrubber pressure drop recorded during the most recent performance test. 2. For incinerators that measured an average of greater than 0.75 lbs PM/ton dry sludge input during the most recent performance test, report pressure drop greater than the result of this calculation: $P = -111E + 72.15$ where P = % reduction in pressure drop, and E = average PM emissions (kg/Megagram) <p>b. The average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more where the average oxygen content measured during the most recent performance test is exceeded by more than 3%.</p> | | | | |
| 15. | <p>Other Notifications and Reports Notify the Department before starting or stopping use of a continuous monitoring system for determining compliance with any emission limit.</p> | 1 month before starting or stopping continuous monitoring | EU01 | 40 CFR Part 62 Subpart LLL §62.16030 | Noted |
| 16. | <p>Site-Specific Monitoring Plan If the Owner or Operator determines that the information and procedures documented in the SSMP, which will also serve as the Air Pollution Control Equipment Monitoring Plan required by Env-A 810, need to be changed at any time to accurately represent changes in monitoring procedures or activities performed to maintain the control equipment, the Owner or Operator shall submit a revised monitoring plan, as applicable, to the Department in writing.</p> | Submit to the Department within 30 days of any change | PCE03-PCE05 | 40 CFR Part 61 Subpart LLL 62.15995(h) & Env-A 810.01 | Noted |

| Table 8 – Applicable Reporting Requirements | | | | | |
|--|---|---|---------------------------------|-------------------------|------------------|
| Item # | Reporting Requirement | Frequency | Applicable Emission Unit | Regulatory Basis | Compliant |
| 17. | <i>Air Pollution Control Equipment Monitoring Plan</i> If the Owner or Operator determines that the information and procedures documented in the air pollution control equipment monitoring plan submitted with Application 14-0141 need to be changed at any time to accurately represent the activities performed to maintain the control equipment, the Owner or Operator shall submit a revised monitoring or management plan, as applicable, to the Department in writing. | Submit to the Department within 30 days of any change to the plan | PCE01 and PCE02 | Env-A 810.01(e) | Noted |

IX. Permit Deviations

In its 2021 S2 Semi-Annual Permit Deviation and Monitoring Report (SAPDMR), the Facility submitted notification that the oxygen monitoring system associated with the CEMS experienced intermittent failures between July 10 – 22, 2021 and August 24 – September 22, 2021. The Facility took appropriate actions to bring the system back in line and maintains a spare analyzer on site; however, the Facility did not provide written notification of this until January 21, 2022. The Facility submitted timely notification of excursions from the minimum SSI freeboard temp which occurred on January 22, 2022, October 13, 2022, and June 19, 2023. The Facility also submitted timely notification of an excursion from the minimum scrubber liquid pH on the lower tray which occurred on October 7, 2013. The Facility noted the causes and length of the excursions and took corrective action to bring the process back within operating limits.

X. Other Findings

There were no other findings during this inspection.

XI. Enforcement History and Status

Joint Stipulation and Order to Terminate the Consent Decree between United States of America and City of Manchester was terminated effective January 19, 2023. NHDES did not take any enforcement actions during this evaluation period.

XII. Compliance Assistance, Recommendations and Corrective Actions

During the inspection, excursions related to low freeboard temperatures were discussed and the Facility noted strategies for reducing these issues in the future, including managing the time period during which sewage sludge is introduced to the incinerator.

NHDES recommends that the Facility explore the Energy Efficiency Incentive Program at www.nhsaves.com. For major renovations and end of life replacement of electrical devices, up to 75% of the incremental cost to install

high efficiency equipment is covered. The retrofit program offers incentives up to 50% of the installed cost to replace older equipment with new, energy efficient equipment.

In addition, the Facility can receive email notifications of rule changes by subscribing to E-News found at the following link: [NH Department of Environmental Services : Sign Up to Stay in Touch \(constantcontact.com\)](https://constantcontact.com) and selecting “NH Air Rulemaking Notices”.

Report Prepared By: David Smith
Title: Compliance Assessment Section Supervisor
Signed: David Smith