



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



**Robert R. Scott, Commissioner**

August 30, 2017

Frederick McNeill, Chief Engineer  
City of Manchester, Highway Department – Environmental Protection Division  
Manchester Wastewater Treatment Plant  
300 Winston St  
Manchester, NH 03103-6826

RE: On-Site Full Compliance Evaluation Report

Dear Mr. McNeill:

The New Hampshire Department of Environmental Services, Air Resources Division (NHDES) has completed a Full Compliance Evaluation of Manchester Wastewater Treatment Plant located in Manchester, New Hampshire. The purpose of the evaluation was to determine compliance with its State Permit to Operate SP-0267 and the N.H. Code Admin. Rules, Env-A 100 *et seq.* The compliance evaluation included an on-site inspection completed on August 16, 2017. This is a copy of the On-Site Full Compliance Evaluation Report for your review and records.

NHDES identified deficiencies during this compliance evaluation, as detailed in this report. The results of the compliance evaluation have been forwarded to the Enforcement Section for further review.

If you have any questions, please do not hesitate to give me a call at (603) 271-6797 or by email at [Alan.Moulton@des.nh.gov](mailto:Alan.Moulton@des.nh.gov).

Sincerely,

Alan H. Moulton  
Compliance Assessment Engineer  
Air Resources Division

cc: Mayor, City of Manchester, One City Hall Plaza, Manchester, NH 03101  
Robert Robinson, City of Manchester, Highway Dept. – EPD, 300 Winston St, Manchester, NH 03103

## Abbreviations and Acronyms

AAL	Ambient Air Limit
acf	actual cubic foot
ags	above ground surface
ASTM	American Society of Testing and Materials
Btu	British thermal units
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstracts Service
CEMS	Continuous Emissions Monitoring System
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> e	CO <sub>2</sub> equivalent emissions
COMS	Continuous Opacity Monitoring System
DER	Discrete Emission Reduction
Env-A	New Hampshire Code of Administrative Rules – Air Resources Division
ERC	Emission Reduction Credit
ft	foot or feet
ft <sup>3</sup>	cubic feet
gal	gallon
HAP	Hazardous Air Pollutant as defined in Section 112 of the 1990 Clean Air Act Amendments
HCl	Hydrogen chloride
Hg	Mercury
hp	horsepower
hr	hour
kW	kilowatt
lb	pound
LPG	Liquefied Petroleum Gas
mgd	million gallons per day
MM	million
MW	megawatt
NAAQS	National Ambient Air Quality Standard
NATS	NO <sub>x</sub> Allowance Tracking System
NESHAP	National Emission Standard for Hazardous Air Pollutants
NG	Natural Gas
NHDES	New Hampshire Department of Environmental Services
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM <sub>10</sub>	Particulate Matter < 10 microns

PM <sub>2.5</sub>	Particulate Matter < 2.5 microns
ppm	parts per million
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
QIP	Quality Improvement Plan
RACT	Reasonably Available Control Technology
RGGI	Regional Greenhouse Gas Initiative
RICE	Reciprocating Internal Combustion Engine
RSA	Revised Statutes Annotated
RTAP	Regulated Toxic Air Pollutant
scf	standard cubic foot
SCR	Selective Catalytic Reduction
SDS	Safety Data Sheet
SNCR	Selective Non-Catalytic Reduction
SO <sub>2</sub>	Sulfur Dioxide
TSP	Total Suspended Particulate
tpy	tons per consecutive 12-month period
ULSD	Ultra-Low Sulfur Diesel
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

## I. Facility Description

NHDES conducted an On-Site Full Compliance Evaluation of the Manchester Wastewater Treatment Plant (Manchester WWTP) on August 16, 2017 and the results are presented herein. The compliance evaluation covers the period calendar year 2014 to August 16, 2017.

The Manchester WWTP is owned by the City of Manchester and operated by the Highway Department – Environmental Protection Division. It provides primary and secondary treatment of municipal wastewater for Manchester and some of the surrounding communities. The Manchester WWTP was originally constructed in 1976 to process an average flow of 26 million gallons per day. An expansion completed in 1994 resulted in several facility improvements, including increasing the capacity to 34 mgd, the replacement of the multiple hearth sludge incinerator with a fluidized bed sewage sludge incinerator, new odor control measures, and a new data acquisition and equipment status control system. The facility became subject to Title V permitting when, on March 21, 2011, EPA published 40 CFR Part 60, Subpart M - *Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units* and later, 40 CFR Part 62, Subpart LLL – *Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010*. The facility currently has a State Permit to Operate, SP-0267. On March 21, 2014, the Manchester WWTP submitted Title V permit application #14-0141. On May 9, 2014, NHDES sent the facility a completeness letter indicating that continued operation of the facility is covered under the application shield provisions of N.H. Admin. Rules Env-A 609.08, *Application Shield*.

Sources of emissions at the facility include: the wastewater treatment plant operations, a fluidized bed sewage sludge incinerator, boilers for heating, underground fuel storage tanks, a solvent degreaser, and four stationary combustion turbines used to power emergency generators. The treatment process includes screening and grit removal, primary clarification, mechanical aeration activated sludge, secondary clarification, and disinfection. Sludge handling processes include gravity thickening of combined primary and secondary clarifier sludge, centrifuges for dewatering, and incineration.

Facility name and address	City of Manchester, Highway Dept. – Environmental Protection Division Wastewater Treatment Plant 300 Winston Street Manchester, New Hampshire 03103
County	Hillsborough
Telephone	(603) 624-6421
AFS#	3301100089
Source Type	Title V
Inspection Date/Time	August 16, 2017, 9:30 am

Inspection Type	On-Site Full Compliance Evaluation
Weather	78°F., 10 mph wind from the Northwest, and sunny
Inspection Period	2014 to August 16, 2017
Inspected by	Alan Moulton, NHDES Compliance Assessment Engineer Cathy Beahm, NHDES Air Permit Programs Manager
Source Contact(s)	Robert Robinson, WWTP Superintendent David St. Armand, Chief Operator
Last Inspection	October 9, 2014
<p>Last Inspection Results:</p> <ol style="list-style-type: none"> <li>1. Comply with the freeboard temperature requirements, specified in Table 4, Item #12, of Permit SP-0267, or contact Cathy Beahm to modify the permit. Keep monthly records of propane consumption and sulfur content as required by Table 7b, Item #2 of TV-0060.</li> <li>2. Maintain records on the type and amount of fuel used in all permitted devices, including the boilers EU02 and EU03, as well as the monthly hours of operation, pursuant to Table 6, Item #13 of Permit SP-0267.</li> <li>3. Maintain a 12-month running total of facility-wide NOx emissions, pursuant to Table 6, Item #6 of Permit SP-0267.</li> <li>4. Submit future annual emissions reports and annual emission-based fees by April 15 of the following calendar year.</li> <li>5. Include all required information in future annual emissions reports, pursuant to Table 7, Item #1 of Permit SP-0267.</li> <li>6. Submit future semi-annual reports timely, as required by Table 7, Item #3 of Permit SP-0267.</li> <li>7. Conduct stack testing such that the facility can determine its compliance status with the future requirements pursuant to 40 CFR 60, Subpart M, by March 21, 2016.</li> <li>8. Comply with all future 40 CFR 60, Subpart M and Title V requirements.</li> <li>9. Comply with all requirements, pursuant to 40 CFR 63, Subpart JJJJJ.</li> </ol> <p><b><i>The Manchester WWTP has corrected the items above, with the exception of those pertaining to 40 CFR 60, Subpart M. New Hampshire does not have delegation of these regulations so the USEPA is working with the facility to bring it into compliance.</i></b></p>	

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

Permitting / Application Timeline			
Application	14-0141 (Title V application)	Submitted (Timely)	March 21, 2014
Permit	SP-0267	Issued	December 30, 2013
		Minor Permit Amendment	June 19, 2014
		Expires	December 31, 2018
Application	09-0092 (Renewal application)	Submitted (Timely)	April 16, 2009
Application for Minor Permit Amendment	14-0244	Submitted	May 9, 2014

The new USEPA sewage sludge incinerator regulations required Title V application submission on or before March 21, 2014. The Manchester WWTP filed a timely application for a Title V Operating Permit on March 21, 2014. The application is currently on hold awaiting final action by the USEPA and the Manchester WWTP on the sewage sludge incinerator rules.

The on-site inspection included an opening meeting to discuss the purpose of the inspection as well as the rules pertaining to claims of confidentiality and facility safety concerns. The Manchester WWTP agreed to the inspection and authorized access. Material provided and operations conducted by the facility at the time of the inspection were not claimed as confidential.

## II. Emission Unit Identification and Facility Wide Emissions

Table 1 below, from Permit SP-0267, lists the permitted emission units as verified during the evaluation.

Table 1 - Emission Unit Identification, Significant Activities				
Emission Unit ID	Device Identification	Manufacturer Model Number Serial Number	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s)
EU01	Fluidized Bed Sewage Sludge Incinerator (I1)	Zimpro Model FBI	1994	Maximum fuel charge rate: 3,500 lb/hr of dry sludge and 500 lb/hr of dry sludge scum 4 Primary burners: 4.5 MMBtu/hr each, equivalent to 30 gal/hr of #2 fuel oil each Secondary Preheat burner: 16.5 MMBtu/hr, equivalent to 118 gal/hr of #2 fuel oil or 269.6 cfm of natural gas

**Table 1 - Emission Unit Identification, Significant Activities**

Emission Unit ID	Device Identification	Manufacturer Model Number Serial Number	Installation Date	Maximum Design Capacity and Permitted Fuel Type(s)
EU02	Boiler #1 (B1)	Cleaver Brooks CB-600-250 L57727	June, 1974	10.5 MMBtu/hr #2 fuel oil – equivalent to 75 gal/hr
EU03	Boiler #2 (B2)	Cleaver Brooks CB-600-250 L57728	June, 1974	10.5 MMBtu/hr #2 fuel oil – equivalent to 75 gal/hr
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 GSE-1000 S431098	April, 1976	12.6 MMBtu/hr (900 kW; 1,207 hp) #2 fuel oil – equivalent to 90 gal/hr
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

As of May 1, 2017, EU02 (Boiler #1) and EU03 (Boiler #2) were removed from the facility.

### Insignificant Activities

The table below lists the current insignificant activities identified by the Manchester WWTP and contained in the permit application 14-0141. These activities were confirmed by NHDES during the inspection. The Manchester WWTP is replacing Boilers #1, #2, and #3 with four boilers that are each rated below permitting thresholds. The Manchester WWTP is in the process of installing the new boilers. These boilers should be added to the insignificant activities list.

Insignificant Activities					
Device Description	Source ID	Equipment ID #	Make Model Size	Date Installed	Location
Crescent Road Carbon Tower	O1		Westates 12,000 cfm	1994	Crescent Road Pump Station
Septage Receiving Carbon Tower	O2		Westates 700 cfm	1994	Septage Receiving Facility
Aerated Grit Carbon Tower	O3		Westates 2,500 cfm	1994	Near Administrative Building
Sludge Thickening Mist Chambers	O4		Calvert Project 1279 40,000cfm	1994	Administrative Building
Crescent Road Pump Station Boiler	B4		Smith Carlin 702CRD 0.738 MMBtu/hr	2003	Crescent Road Pump Station
#2 Fuel Tank for Generators 2 & 3		Tank #6	Horizontal Underground 100 gallon		Filled in Place
#2 Fuel Tank for Generators 4 & 5	T7	Tank #7	Horizontal Underground 6,000 gallon	1995	Crescent Road Pump Station
#2 Fuel Tank for Boilers 1, & 2	T8	Tank #8	Horizontal Underground 15,000 gallon	1995	Administrative Building
#2 Fuel Tank for Incinerators	T9	Tank #9	Horizontal Underground 15,000 gallon	1995	Administrative Building
Solvent Degreaser	DG1		Kleen Master Fee Standing 50 gallon	2008	Administrative Building

The Manchester WWTP has the following boilers that need to be added to the Insignificant Activity List

Device Description	Make Model Size	Date Installed	Location
Chlorine Building Low NOx Boiler #1	Aerc 1.5 MMBtu/hr	2013	Chlorine Building
Chlorine Building Low NOx Boiler #2	Aerc 1.5 MMBtu/hr	2013	Chlorine Building
Administrative Building Boiler			Administrative Building



Device Description	Make Model Size	Date Installed	Location
Crescent Road Pump Station Boiler	HB Smith		Crescent Road Pump Station Building
Incinerator Building Boiler #1	Cleaver Brooks CFC-700-3300 3.3 MMBtu/hr	2017	Incinerator Building
Incinerator Building Boiler #2	Cleaver Brooks CFC-700-3300 3.3 MMBtu/hr	2017	Incinerator Building
Incinerator Building Boiler #3	Cleaver Brooks CFC-700-3300 3.3 MMBtu/hr	2017	Incinerator Building
Incinerator Building Boiler #4	Cleaver Brooks CFC-700-3300 3.3 MMBtu/hr	2017	Incinerator Building

NHDES observed EU01 and EU04 through EU07 identified in Table 1. EU02 and EU03 were removed from the facility prior to the inspection. EU01 was in operation during the inspection. EU04 through EU07 were not in operation during the inspection. NHDES observed the devices listed as insignificant activities except for the underground storage tanks.

NHDES observed the hour meters on EU04 through EU07. The hour meter readings listed in the table below are from the non-resettable hour meters on the turbines and show the total hours on the turbine from initial start-up. Each of the emergency generator turbines operated less than the 120 hour per year limit for each year between the last inspection in 2014 and the 2017 inspection. The Manchester WWTP presented documentation that during 2015 through 2017, the emergency generator turbines operated for less than 100 hours per year.

Unit	Hour Meter Reading – 2014 evaluation (hours)	Hour Meter Reading – 2017 evaluation (hours)	Difference (hours)
Emergency Generator #2 (EU04)	780	803.6	23.6
Emergency Generator #3 (EU05)	855	878.1	23.1
Emergency Generator #4 (EU06)	Not Available	508.0	N/A
Emergency Generator #5 (EU07)	1,257	1299.1	42.1

The table below lists the facility's reported annual emissions for the review period.

Facility Reported Annual Emissions (tons)							
	TSP	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC	HAPs/RTAPs
<b>Permitted Limits</b>	---	---	---	<b>50</b>	---	---	<b>10/25</b>
2016	0.71	0.09	3.65	3.63	0.23	0.07	0.71
2015	0.72	0.15	4.63	4.33	0.55	0.07	0.59
2014	0.66	0.11	3.78	3.64	0.35	0.06	0.61

### III. Control Equipment

Table 2 below, from Permit SP-0267, lists the required control equipment for the facility's devices, as verified during the evaluation.

Table 2 - Pollution Control Equipment Identification			
Pollution Control Equipment ID	Description	Purpose	Emission Unit Controlled
PCE01	Biofilter (BF1) 50' x 150' 12,000 cfm	Control of H <sub>2</sub> S	The first basin in each of 4 aeration treatment system trains (anoxic/anaerobic zones)
PCE02	Biofilter (BF2) 50' x 150' 22,000 cfm	Control of H <sub>2</sub> S	Primary Clarifiers
PCE03	Wet Scrubber	Control of VOCs, HAPs and RTAPs	EU01

### IV. Stack Criteria

Table 3 below, from Permit SP-0267, lists the permitted stack requirements for the facility. During the evaluation, NHDES observed that the stacks were vertical and unobstructed, with no modifications noted by the facility.

Table 3 - Stack Criteria			
Stack Number	Emission Unit or Pollution Control Equipment ID	Minimum Height (feet above ground surface)	Maximum Exit Diameter (feet)
1	EU01	121.5	1.67
2	EU02 and EU03	50	3.5

**V. Compliance with Operating and Emission Limitations**

Please note that throughout this report, the columns labeled "Regulatory Citation" may often refer to previous permits as opposed to specific regulations.

Table 4 below, from Permit SP-0267, lists the operation and emission limitations for the facility, and any deficiencies noted during the evaluation.

<b>Table 4 - Operating and Emission Limitations</b>				
<b>Item #</b>	<b>Requirement</b>	<b>Applicable Emission Unit</b>	<b>Regulatory Basis</b>	<b>Compliant</b>
1	<u>Facility Wide Emission Limitations</u> Facility wide emissions of NOx shall be limited to less than 50 tpy.	Facility Wide	Env-A 604.02(a)(1)	Yes
2	<u>24-hour and Annual Ambient Air Limit</u> 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 Containing the List Naming All Regulated Toxic Air Pollutants</i> .	Facility Wide	Env-A 1400 (State-Only Enforceable Limitation)	Yes
3	<u>Revisions of the List of RTAPs</u> In accordance with RSA 125-I:5 IV, if the Division revises the list of RTAPs or their respective AALs or classifications under RSA 125-I:4, II and III, and as a result of such revision the Owner or Operator is 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.	Facility Wide	Env-A 1404.02 (State-Only Enforceable Limitation)	Yes

**Table 4 - Operating and Emission Limitations**

Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
4	<p><u>Fuel Usage Limitations</u></p> <p>The facility shall be limited to the following operating limitations:</p> <p>a. Liquid fuel oil consumption for Boilers #1 and #2 combined shall be limited to 752,500 gallons of #2 fuel oil or diesel fuel in any consecutive 12-month period;</p> <p>b. The hours of operation of each emergency generator shall be limited to 120 hours during any consecutive 12-month period; and</p> <p>c. The incinerator shall be limited to burning 14,700 tons of dry sludge and 2,100 tons of dry sludge scum during any consecutive 12-month period.</p>	EU01 – EU07	Env-A 604.02(a)(2)	Yes
5	<p><u>Maximum Sulfur Content Allowable in Liquid Fuels</u></p> <p>The sulfur content of #2 fuel oil shall not exceed 0.40 percent sulfur by weight.</p>	EU01 – EU07	Env-A 1604.01(a)	Yes
6	<p><u>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Standard for Particulate Matter</u></p> <p>The sewage sludge incinerator shall be limited to:</p> <p>a. Particulate matter emissions of 0.65 g/kg dry sludge input (1.30 lb/ton dry sludge input); and</p> <p>b. Opacity shall not exceed 20 percent for any continuous 6-minute period.</p>	EU01	40 CFR 60, Subpart O §60.152	Yes
<p><b>Finding:</b></p> <ul style="list-style-type: none"> <li>• <b>The particulate matter emissions were determined through stack testing conducted on June 14, 1994. The results indicated that the particulate matter emission rate was 0.21 lb/ton dry sludge; and</b></li> <li>• <b>The opacity emissions were determined through stack testing conducted on June 14, 1994. The results indicated that the opacity from the incinerator was 0%.</b></li> <li>• <b>During the inspection, the opacity from EU01 was in compliance with the requirement.</b></li> </ul>				
7	<p><u>40 CFR 61, Subpart C - National Emission Standard for Beryllium</u></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
<p><b>Finding: The facility last conducted a compliance test for beryllium on June 15, 1994. The emission rate determined by the testing is less than <math>1.74 \times 10^{-6}</math> lb/hr, which is approximately equal to <math>4.18 \times 10^{-5}</math> lb/ 24 hours.</b></p>				

**Table 4 - Operating and Emission Limitations**

Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
8	<p><u>40 CFR 61, Subpart E - National Emission Standard for Mercury</u></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
<p><b>Finding: The facility last conducted a compliance test for mercury on June 15, 1994. The emission rate determined by the testing is <math>6.54 \times 10^{-6}</math> lb/hr, which is equal to approximately <math>1.57 \times 10^{-4}</math> lb/ 24 hours.</b></p>				
9	<p><u>Particulate Matter Emission Standards</u></p> <p>Emissions of particulate matter from the sewage sludge incinerator shall not exceed 0.675 grams per dry standard cubic meter (g/dscm), equivalent to 0.3 grains per dry standard cubic foot (gr/dscf), corrected to 7 percent oxygen (O<sub>2</sub>).</p>	EU01	Env-A 1902	Yes
<p><b>Finding: The facility last conducted a compliance test for particulate on June 14, 1994. The emission rate determined by the testing is approximately 0.0043 gr/dscf at 7% O<sub>2</sub>.</b></p>				
10	<p><u>Name Plate and Instruction Posting Requirements</u></p> <p>The owner or operator of an incinerator shall</p> <ol style="list-style-type: none"> <li>Install the manufacturer's name plate which lists the device's model number and rated capacity and the types of waste for which the device is designed, in a conspicuous place on the device; and</li> <li>Post detailed instructions for the operation of the device in a conspicuous place near the device.</li> </ol>	EU01	Env-A 1903.01	No
<p><b>Findings: In its Semi-Annual Permit Deviation and Monitoring Reports for the period July 1, 2014 to June 30, 2015, the Manchester WWTP reported that the name plate was missing and that a new name plate was being made. The new name plate was installed on July 28, 2015. See Section IX. "Permit Deviation Reporting Requirements" for details.</b></p> <p><b>Detailed instructions for the operation of the incinerator are posted near the device and in the control room.</b></p>				
11	<p><u>Trained and Competent Operator Required</u></p> <p>The owner or operator of an incinerator shall designate an individual who has been trained and is competent in the operation of the incinerator to be in charge of the device.</p>	EU01	Env-A 1903.02	Yes

**Table 4 - Operating and Emission Limitations**

Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
12	The temperature of the sand bed and combustion zone shall be maintained between 1,200°F and 1,650°F and the freeboard temperature shall not exceed 1,650°F.	EU01	Env-A 604.01	Yes
13	<u>Pollution Control Equipment Operation and Maintenance</u> a. The minimum pressure drop across the wet scrubber shall be 35 inches of water column; and b. The scrubber system shall be able to deliver water at a flow rate of 100 gal/min to the venturi and up to 400 gal/min to the economizer.	PCE03	Env-A 604.01 & FP-S-0240	Yes
14	<u>Visible Emission Standard for Fuel Burning Devices Installed After May 13, 1970</u> The average opacity from fuel burning devices installed after May 13, 1970 shall not exceed 20 percent for any continuous 6-minute period.	EU02 – EU07	Env-A 2002.02	Yes
<p><b>Finding: The opacity from EU04 through EU07 could not be verified because the devices were not in operation. 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 opacity standards.</b></p> <p><b>EU02 and EU03 have been removed from the facility.</b></p>				
15	<u>Activities Exempt from Visible Emission Standards</u> The average opacity shall be allowed to be in excess of those standards specified in Env-A 2002 for one period of 6 continuous minutes in any 60 minute period during startup, shutdown, malfunction, soot blowing, grate cleaning, and cleaning of fires.	EU02 & EU03	Env-A 2002.04(c) (State-Only Enforceable Limitation)	Yes

**Table 4 - Operating and Emission Limitations**

Item #	Requirement	Applicable Emission Unit	Regulatory Basis	Compliant
16	<p><u>Activities Exempt from Visible Emission Standards</u> Exceedences of the opacity standard in Env-A 2002 shall not be considered violations if the Owner or Operator demonstrates to the Division that such exceedences:</p> <ul style="list-style-type: none"> <li>a. Were the result of the adherence to good boiler operating practices which, in the long term, result in the most efficient or safe operation of the boiler;</li> <li>b. Occurred during periods of cold startup of a boiler over a continuous period of time resulting in efficient heat-up and stabilization of its operation and the expeditious achievement of normal operation of the unit;</li> <li>c. Occurred during periods of continuous soot blowing of the entire boiler tube section over regular time intervals as determined by the operator and in conformance with good boiler operating practice; or</li> <li>d. Were the result of the occurrence of an unplanned incident in which the opacity exceedence was beyond the control of the operator and in response to such incident, the operator took appropriate steps in conformance with good boiler operating practice to eliminate the excess opacity as quickly as possible.</li> </ul>	EU02 & EU03	Env-A 2002.04(d), (e), and (f) (State-Only Enforceable Limitation)	Yes
17	<p><u>Particulate Emission Standards for Fuel Burning Devices Installed After May 13, 1970, but before January 1, 1985</u> The particulate matter emissions from fuel burning devices installed after May 3, 1970, but before January 1, 1985 shall not exceed:</p> <ul style="list-style-type: none"> <li>a. 0.59 lb/MMBtu from each boiler; and</li> <li>b. 0.57 lb/MMBtu from each emergency generator.</li> </ul>	EU02-EU07	Env-A 2002.07	Yes
<p><b>Finding:</b> <i>Compliance with the particulate matter standard can only be verified through stack testing, which has not been required for EU04 through EU07, 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.</i></p> <p><i>EU02 and EU03 have been removed from the facility.</i></p>				

**VI. Compliance with Monitoring and Testing Requirements**

Table 5 below, from Permit SP-0267, lists the monitoring and testing requirements for the facility, and any deficiencies noted during the evaluation.

<b>Table 5 – Monitoring and Testing Requirements</b>						
<b>Item #</b>	<b>Parameter</b>	<b>Method of Compliance</b>	<b>Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>	<b>Compliant</b>
1	To Be Determined	When conditions warrant, the Division may require the Owner or Operator to conduct stack testing in accordance with USEPA or other Division approved methods.	Upon request by the Division	Facility Wide	RSA 125-C:6, XI	<b>Not Applicable</b>
<b>Finding: During the evaluation period, NHDES has not required additional testing.</b>						
2	Sulfur Content of Liquid Fuels	Conduct testing in accordance with appropriate ASTM test methods or retain delivery tickets in accordance with Table 6, Item 4 in order to demonstrate compliance with the sulfur content limitation provisions specified in this permit for liquid fuels.	For each delivery of liquid fuel oil to the facility	Facility Wide	Env-A 806.02 & Env-A 806.05	<b>Yes</b>
<b>Finding: The Manchester WWTP retains fuel oil delivery slips.</b>						
3	Sulfur Content of Gaseous Fuels	Conduct testing to determine the sulfur content in grains of sulfur per 100 cubic feet, of gaseous fuels.	Upon written request by USEPA or the Division	Facility Wide	Env-A 806.03	<b>Not Applicable</b>
<b>Finding: NHDES has not requested testing of the gaseous fuel for sulfur content.</b>						
4	Monitoring of Incinerator Operations	<u>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Monitoring of Operations</u> The owner or operator of any sludge incinerator subject to 40 CFR 60, Subpart O shall: a. Provide access to the sludge charged so that a well-mixed representative grab sample of the sludge can be obtained; b. Install, calibrate, maintain and operate a monitoring device that continuously measures and records the pressure drop of the	As noted	EU01	40 CFR 60, Subpart O §60.153	<b>No</b>



Table 5 – Monitoring and Testing Requirements						
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis	Compliant
		<p>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 <math>\pm 250</math> pascals (<math>\pm 1</math> 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 accuracy of <math>\pm 5</math> 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>				
<p><b>Findings:</b> In its Semi-Annual Permit Deviation and Monitoring Reports for the period January 1, 2016 to December 31, 2016, the Manchester WWTP reported that it failed to record the oxygen content of the EU01 exhaust gas between March 4 and May 22, 2016; July 5 and July 7, 2016; and August 20 and 29, 2016, all due to equipment failures. See Section IX. "Permit Deviation Reporting Requirements" for details.</p>						
5	Additional Monitoring of Incinerator Operations	<p><u>Additional Monitoring Requirements</u></p> <p>The owner or operator shall maintain, calibrate, and operate the following monitoring equipment on the incinerator:</p> <p>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</p>	As noted	EU01	FP-S-0240	No

Table 5 – Monitoring and Testing Requirements						
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis	Compliant
		certified by the manufacturer to have an accuracy of $\pm 5\%$ 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 $\pm 5\%$ 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 $\pm 5\%$ 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 a minimum of one cycle of operation for each successive 5 minute period.				
<p><b>Findings:</b> <i>In its Semi-Annual Permit Deviation and Monitoring Reports for the period January 1, 2016 to December 31, 2016, the Manchester WWTP reported that it failed to record the oxygen content of the EU01 exhaust gas between March 4 and May 22, 2016; July 5 and July 7, 2016; and August 20 and 29, 2016, all due to equipment failures. See Section IX. "Permit Deviation Reporting Requirements" for details.</i></p>						

Table 5 – Monitoring and Testing Requirements						
Item #	Parameter	Method of Compliance	Frequency	Applicable Unit	Regulatory Basis	Compliant
6	Monitoring of Air Pollution Control Equipment	<p><u>Monitoring Requirements of Air Pollution Control Equipment</u></p> <p>The control equipment shall be maintained in good working order and, at a minimum, the maintenance and monitoring requirements listed below shall be performed. The owner or operator shall:</p> <ol style="list-style-type: none"> <li>a. Maintain, monitor and operate the biofilters as described in the Manchester Wastewater Treatment Facility Primary Covers Odor Control Project, Operations Maintenance Information.</li> <li>b. Maintain, monitor and operate the scrubber as described in the Air Pollution Control Equipment Monitoring Plan submitted August 19, 2013 and in a manner consistent with the manufacturer's recommendations;</li> <li>c. Inspect the scrubber, if conditions indicate that the scrubber may need maintenance, but at least annually. The inspection shall be conducted by plant personnel familiar with the operation of the scrubber and connected equipment.</li> </ol>	As noted	PCE01, PCE02 & PCE03	FP-S-0240 & Env-A 604	Yes

**VII. Compliance with Recordkeeping Requirements**

Table 6 below, from Permit SP-0267, lists the recordkeeping requirements for the facility, and any deficiencies noted during the evaluation.

<b>Table 6 - Recordkeeping Requirements</b>					
<b>Item #</b>	<b>Requirement</b>	<b>Duration/ Frequency</b>	<b>Applicable Unit</b>	<b>Regulatory Basis</b>	<b>Compliant</b>
1	<u>Record Retention and Availability</u> Keep the required records on file. These records shall be available for review by the Division upon request.	Retain for a minimum of 5 years	Facility Wide	Env-A 902	Yes
2	<u>General Recordkeeping Requirements for Process Operations</u> Maintain the following records for process operations: a. Hours of operation of the incinerator; and b. Amount of sludge and scum burned in the incinerator.	Monthly	EU01	Env-A 903.02	Yes
3	<u>General Recordkeeping Requirements for Combustion Devices</u> Maintain the following records of fuel characteristics and utilization for the fuel used in the combustion devices: a. Type (e.g. #2 fuel oil, natural gas); and b. Amount of fuel burned and hours of operation of each device to be used to apportion fuel use between the multiple devices.	Monthly	EU01- EU07	Env-A 903.03 & Env-A 604.02(a)(3)	No
<b>Findings: In its Semi-Annual Permit Deviation and Monitoring Reports for the period July 1, 2014 to December 31, 2015, the Manchester WWTP reported that it failed to track the natural gas used in the secondary preheat burner on EU01. See Section IX. "Permit Deviation Reporting Requirements" for details.</b>					
4	<u>Liquid Fuel Oil Recordkeeping Requirements</u> In lieu of sulfur testing pursuant to Table 5, 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.	Whenever there is a change in fuel supplier but at least annually	EU01 - EU07	Env-A 806.05	Yes
<b>Finding: The Manchester WWTP retains fuel oil delivery slips.</b>					

Table 6 - Recordkeeping Requirements					
Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis	Compliant
5	<p><u>Gaseous Fuel Recordkeeping Requirements</u></p> <p>Maintain one of the following:</p> <ul style="list-style-type: none"> <li>a. Sulfur content as percent sulfur by weight or in grains per 100 cubic feet of fuel;</li> <li>b. Documentation that the fuel source is from a utility pipeline; or</li> <li>c. Documentation that the fuel meets state sulfur limits.</li> </ul>	Whenever there is a change in natural gas fuel supplier but at least annually	EU01	Env-A 903.03	Yes
6	<p><u>Additional Recordkeeping Requirements: Facility Wide Emission Limitations</u></p> <p>Maintain a 12-month running total of facility wide emissions of NO<sub>x</sub>, which shall include emissions from non-permitted devices, for the purpose of demonstrating that the total emissions of this pollutant is below the major source threshold of 50 tpy.</p>	Monthly	Facility Wide	Env-A 906 and Env-A 604.02(a)(3)	Yes
7	<p><u>Additional Recordkeeping Requirements</u></p> <p>The owner or operator shall maintain additional records, as necessary, for the purpose of demonstrating compliance with all federal and state statute, rules, regulations and permits. These additional records shall include, but are not limited to:</p> <ul style="list-style-type: none"> <li>a. Records of all air pollution control equipment monitoring and maintenance activities required under Table 5; and</li> <li>b. Records of the measured temperatures of the incinerator.</li> </ul>	Monthly	Facility Wide	Env-A 906	Yes

Table 6 - Recordkeeping Requirements					
Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis	Compliant
8	<p><u>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Recordkeeping</u></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 2 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 5, Item 4(b); and</p> <p>b. A record of the measured oxygen content of the incinerator exhaust gas, as required in Table 5, Item 4(c).</p>	As noted	EU01	40 CFR 60, Subpart O §60.153(c)	No
<p><b>Findings: In its Semi-Annual Permit Deviation and Monitoring Reports for the period January 1, 2016 to December 31, 2016, the Manchester WWTP reported that it failed to record the oxygen content of the EU01 exhaust gas between March 4 and May 22, 2016; July 5 and July 7, 2016; and August 20 and 29, 2016, all due to equipment failures. See Section IX. "Permit Deviation Reporting Requirements" for details.</b></p> <p><b>The Manchester WWTP maintains records of the pressure drop of the gas flow through the wet scrubbing device.</b></p>					
9	<p><u>General NOx Recordkeeping Requirements</u></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 5, Item 7.a, above, including:</p> <ol style="list-style-type: none"> <li>1) Typical hours of operation per day;</li> <li>2) Typical days of operation per calendar month;</li> <li>3) Number of weeks of operation;</li> <li>4) Type and amount of each fuel burned;</li> <li>5) Heat input rate in MMBtu/hr;</li> <li>6) Actual NOx emissions for the calendar year and a typical high ozone day during that calendar year; and</li> <li>7) Emission factors and the origin of the emission factors used to calculate the NOx</li> </ol>	Maintain Up-to-Date Data	EU01 - EU07	Env-A 905.02	Not Applicable

Table 6 - Recordkeeping Requirements					
Item #	Requirement	Duration/ Frequency	Applicable Unit	Regulatory Basis	Compliant
	emissions.				
<b>Finding: Actual NOx emissions were less than 10 tons per year during the evaluation period.</b>					
10	<p><u>Regulated Toxic Air Pollutants</u></p> <p>Maintain records documenting compliance with Env-A 1400.</p> <p>Compliance was demonstrated at the time of permit issuance as described in the Division's Application Review Summary for application #09-0092. The Owner or Operator must update the compliance demonstration by using one of the methods provided in Env-A 1405 if:</p> <ul style="list-style-type: none"> <li>a. There is a revision to the list of RTAPs lowering the AAL or De Minimis value for any RTAP emitted from the facility;</li> <li>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 raw material or fuel will increase);</li> <li>c. An RTAP that was not evaluated in the Application Review Summary will be emitted (e.g., a new raw material will be used); or</li> <li>d. Stack conditions (e.g. air flow rate) change.</li> </ul>	Update prior to future process changes and within 90 days of each revision of Env-A 1400	Facility Wide	Env-A 902.01 (State-Only Enforceable Limitation)	Yes

**VIII. Compliance with Reporting Requirements**

Table 7 below, from Permit SP-0267, lists the reporting requirements for the facility, and any deficiencies noted during the evaluation.

Table 7 - Reporting Requirements					
Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
1	<p><u>Annual Emissions Report</u></p> <p>Submit an annual emissions report which shall include the following information:</p> <ul style="list-style-type: none"> <li>a. Actual calendar year emissions from the incinerator of NOx, CO, SO<sub>2</sub>, TSP,</li> </ul>	Annually (received by NHDES no later than April 15th of the following	EU01 - EU07 & PCE01 - PCE03	Env-A 907.01	No

**Table 7 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
	<p>VOCs and RTAPs (speciated by individual RTAP);</p> <p>b. Actual calendar year emissions from each boiler and each emergency generator of NO<sub>x</sub>, CO, SO<sub>2</sub>, TSP, and VOCs;</p> <p>c. Actual calendar year emissions of hydrogen sulfide from the primary clarifiers and aeration tanks;</p> <p>d. The methods used in calculating such emissions in accordance with Env-A 705.02, <i>Determination of Actual Emissions for Use in Calculating Emission-Based Fees</i>; and</p> <p>e. All information recorded in accordance with Table 6, Items 2, 3, 4, and 5.</p>	year)			
<p><b>Findings: The Annual Emissions Reports are missing the following data: Hours of operation of the Incinerator. Monthly fuel usage of each boiler or monthly hours of operation of each boiler (boiler #1 &amp; #2). The Report only gave annual total for both boilers combined. There is no sulfur data on the fuel oil burned. The facility is recording or has this data and is submitting it to NHDES with other reports required by the permit. During the inspection, NHDES requested that the missing data be included in the Annual Emissions Reports.</b></p>					
2	<p><u>NO<sub>x</sub> Emission Statements Reporting Requirements</u></p> <p>If the actual annual NO<sub>x</sub> emissions from all permitted devices are greater than or equal to 10 tpy, then include the following information with the annual emission report:</p> <p>a. A breakdown of NO<sub>x</sub> emissions reported pursuant to Table 7, Item 1 by month; and</p> <p>b. All data recorded in accordance with Table 6, Item 9.</p>	Annually (received by NHDES no later than April 15th of the following year)	EU01 - EU07	Env-A 909	<b>Not Applicable</b>
<p><b>Finding: Actual NO<sub>x</sub> emissions were less than 10 tons per year during the evaluation period.</b></p>					



**Table 7 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
3	<p><u>40 CFR 60, Subpart O – Standards of Performance for Sewage Treatment Plants - Reporting</u></p> <p>The owner or operator shall submit, to the Division and to USEPA Region 1 semi-annually, a report containing the information described below. The address for USEPA Region 1 is:</p> <p style="padding-left: 40px;">EPA-New England, Region 1 5 Post Office Sq. Suite 100 Mail Code OES04-2 Boston, MA 02109-3912</p> <p>The address for the Division is:</p> <p>NH Department of Environmental Services Air Resources Division 29 Hazen Drive P.O. Box 95 Concord, NH 03302-0095 ATTN: Section Supervisor, Compliance Bureau</p> <p>a. The average scrubber pressure drop for each period of 15 minutes or more during which the pressure drop was less than 28 inches of water; and</p> <p>b. The average oxygen content in the incinerator exhaust gas for each period of 1-hour duration or more where the percent oxygen levels exceed 9.3%.</p>	Semi-annually received by NHDES and USEPA no later than July 31 <sup>st</sup> and January 31 <sup>st</sup> of each calendar year	EU01	40 CFR 60, Subpart O §60.155(a)	Yes
<p><b>Finding:</b> <i>The Manchester WWTP is required to issue this report if the scrubber pressure drop is less than 28 inches of water or if EU01's exhaust gas has an oxygen content greater than 9.3%. The scrubber pressure drop meets the limit; therefore, this does not need to be reported. EU01's exhaust gas oxygen content is always greater than 9.3% and the Manchester WWTP reports this in its Semi-Annual Permit Deviation and Monitoring Report. See Other Findings.</i></p>					
4	<p><u>Emission Based Fees</u></p> <p>Pay emission-based fees in accordance with Condition XIII.</p>	Annually (received by NHDES no later than April 15th of the following year)	EU01 - EU07	Env-A 700	Yes

**Table 7 - Reporting Requirements**

Item #	Requirement	Frequency	Applicable Emission Unit	Regulatory Basis	Compliant
5	<u>Permit Deviation Reporting Requirements</u> Report permit deviations that cause excess emissions in accordance with Condition X.B.	Within 24 hours of discovery of excess emission	EU01 - EU07	Env-A 911.04(b)(1)	Yes
6	<u>Update to Air Pollution Dispersion Modeling Impact Analysis</u> If an update to the facility's air pollution dispersion modeling impact analysis is required pursuant to Env-A 606.02, submit the information required pursuant to Env-A 606.04: a. With the permit application submitted for the change which triggered the analysis; or b. Within 15-days of completion of the change which triggered the analysis, if a permit application is not required.	As specified	Facility Wide	Env-A 910.01	Not Applicable
<p><b>Finding:</b> During the evaluation period, the Manchester WWTP has not been required to update its air dispersion modeling impact analysis.</p>					

**IX. Permit Deviation Reporting Requirements**

The Manchester WWTP is aware of the recordkeeping and reporting requirements for permit deviations. During the evaluation period, the Manchester WWTP reported the following permit deviations to NHDES through their Semi-Annual Permit Deviation and Monitoring (PD & M) Reports.

1. In the PD & M reports for the second half of 2014 and the first half of 2015, the Manchester WWTP reported that the name plate on the incinerator was missing and that a new name plate was being made. It also reported that it did not track the natural gas used in the secondary preheat burner on EU01. In the future, the Manchester WWTP shall monitor the incoming fuel meter before and after operating the incinerator, to determine the amount of fuel used each time the incinerator is operated and report the usage in its Annual Emissions Report. There were no excess emissions.
2. In the PD & M report for the second half of 2015, the Manchester WWTP indicated that it had installed the new name plate on EU01. It also reported that it did not track the

natural gas used in the secondary preheat burner on EU01. In the future, the Manchester WWTP shall monitor the incoming fuel meter before and after operating the incinerator, to determine the amount of fuel used each time the incinerator is operated and report the usage in its Annual Emissions Report. There were no excess emissions.

3. In the PD & M report for the first half of 2016, the Manchester WWTP indicated that between March 4, 2016 and May 22, 2016, the oxygen sensor failed and they had issues with the CEMs computer. During this time period, O<sub>2</sub> and CO emissions were not recorded. The facility replaced the oxygen sensor and the CEMs computer. There is no O<sub>2</sub> and CO data for this period.
4. In the PD & M report for the second half of 2016, the Manchester WWTP indicated that between July 5 and July 7, 2016, the CEMs computer failed. The CEMs computer was replaced. Also, between August 20 and August 29, 2016, the Programmable Logic Controller (PLC) failed. The PLC was replaced. During both time periods O<sub>2</sub> and CO emissions were not recorded and no data is available.

#### **X. Other Findings**

After March 21, 2011, when the Manchester WWTP became a Title V facility, it began to submit Annual Compliance Certifications and Semi-Annual Permit Deviation and Monitoring Reports. During the evaluation period, it submitted the report for the July 1, 2014 to December 31, 2014 Semi-Annual Permit Deviation and Monitoring Report late. It was submitted on February 12, 2015. Also, the January 1, 2017 to June 30, 2017 Semi-Annual Permit Deviation and Monitoring Report was submitted late. It was submitted on August 1, 2017.

The two permitted boilers are subject to 40 CFR 63, Subpart JJJJJ. The Manchester WWTP completed the tune up on each boiler and a one-time energy assessment on November 22, 2016. The Manchester WWTP completed the Notice of Compliance Status to USEPA prior to January 6, 2017. This was completed in response to the enforcement action listed below.

#### **XI. Enforcement History and Status**

On September 21, 2016, the Manchester WWTP was issued a Notice of Findings for the violations identified during NHDES' October 9, 2014 evaluation. On October 14, 2016, it submitted its response to NHDES. On January 19, 2017, NHDES issued a Letter of Compliance for Notice of Findings to the Manchester WWTP.

**XII. Compliance Assistance, Recommendations and Corrective Actions**

Based on the findings of this compliance evaluation, NHDES recommends the following actions to maintain facility compliance with the identified deficiencies and operating requirements:

- a) Operate the monitoring equipment on the incinerator (EU01) such that the oxygen content of the EU01 exhaust is continuously recorded, as required by Table 5, Item #4 of the Permit.
- b) Track the natural gas usage in the secondary preheat burner on EU01, as required by Table 6, Item #3 of the Permit.
- c) Include the following data in the Annual Emissions Reports: Hours of operation of the Incinerator. Monthly fuel usage of each boiler or monthly hours of operation of each boiler (boiler #1 & #2). The Annual Emissions Report only gave annual total for both boilers combined. And, the sulfur data on the fuel oil burned. This is required to meet the requirements in Table 7, Item #1 of the Permit. The facility is submitting this data to NHDES in other reports required by the permit.

Report Prepared By	Alan H. Moulton
Title	Compliance Assessment Engineer
Signed	