Naugatuck Wastewater Treatment Facility

Title V Permit Application

Table of Contents

Connecticut Department of Energy & Environmental Protection
Bureau of Air Management
Engineering & Enforcement Division

CPPU USE ONLY

App #: _____

Doc #: _____

New Title V Permit or Renewal of an Existing Title V Permit Application

Program/EI/App Type:
Air Engineering/Title V/New
Air Engineering/Title V/Renewal

Complete this form in accordance with the instructions (DEEP-TV-INST-100) to ensure the proper handling of your application. Print or type unless otherwise noted. You must submit a copy of the published notice of permit application and the completed *Certification of Notice Form* (DEEP-APP-005A) along with this form. **There is no fee required.** [#754]

This form is to be used for a new Title V permit or the renewal of an existing Title V permit only. Please complete the appropriate form for a revision, minor modification or non-minor modification to an existing Title V permit.

Questions? Visit the Air Permitting web page or contact the Air Permitting Engineer of the Day at 860-424-4152.

Applicant Name: Borough of Naugatuck

Part I: Application Information

Check the appropriate box identifying the application type.

This application is for (check one):	Please identify any previous or existing town-permit numbers in the space provided.
☒ A *new* permit	Existing Town-Permit Numbers: **N/A**
☐ A *renewal* of an existing permit	Existing Permit Expiration Date: **N/A**

Town Where Site is Located: Naugatuck (500 Cherry St ext, CT DEEP Town No. 109)

Brief Description of Project: The Borough of Naugatuck owns a 10.3 mgd publicly owned biological treatment works (POTW, CTDEEP Premises Number 11). The Facility operates an onsite fluidized bed incinerator (FBI). The incinerator processes biosolids generated at the POTW, hauled biosolids generated at other POTWs and hauled septage. The current New Source Review permit for the incinerator allows operations up to 84 dry tons per day. The facility also has various pieces of fuel burning equipment including boilers and emergency generators.

PUBLIC NOTICE INFORMATION		
The public notice of application must be published ***prior*** to submitting an application, as required in CGS section 22a-6g. A copy of the published notice of application and the completed *Certification of Notice Form* (DEEP-APP-005A) must be included as Attachment AA to this application. Your application will ***not*** be processed if Attachment AA is not included.	**Date of Publication**	**Nov 21, 2018**

Part II: Applicant Information

- *If an applicant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, the applicant's name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of State's database (CONCORD). **(www.concord-sots.ct.gov/CONCORD/index.jsp)***
- *If an applicant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*
- *If there are any changes or corrections to your company/facility or individual name, mailing or billing address or contact information, please complete and submit the Request to Change Company/Individual Information to the address indicated on the form. For any other changes you must contact the specific program from which you hold a current DEEP license. If there is a change in ownership, please contact the Permit Assistance Office for questions concerning license transfers at 860-424-3003.*

1. **Applicant Name: Borough of Naugatuck**

   Mailing Address: **229 Church Street 3rd Floor**

   City/Town: **Naugatuck** State: **CT** Zip Code: **06770**

   Business Phone: **(203)720-7005** ext.:

   Contact Person: Phone: ext.

   *E-mail:

   *By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes.

   a) Applicant Type (check one): ☐ individual ☐ *business entity ☐ federal agency
   ☐ state agency ☒ municipality ☐ tribal

   *If **other than a business entity**, skip to item 1b.

   *If a business entity:

   i) check type: ☐ corporation ☐ limited liability company ☐ limited partnership
   ☐ limited liability partnership ☐ statutory trust ☐ Other: _____

   ii) provide Secretary of the State business ID #:_____ *This information can be accessed at* the Secretary of State's database *(CONCORD). (**www.concord-sots.ct.gov/CONCORD/index.jsp**)*

   iii) ☐ Check here if your business is **NOT** registered with the Secretary of State's office.

   b) Applicant's interest in property at which the proposed activity is to be located:

   ☒ site owner ☐ option holder ☐ lessee
   ☐ easement holder ☐ operator ☐ other (specify): _____

   ☐ Check if any co-applicants. If so, attach additional sheet(s) with the required information as requested above.

2. **Billing contact, if different than the applicant:**

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person: Phone: ext.

   E-mail:

Part II: Applicant Information (continued)

3. **Primary contact for departmental correspondence and inquiries, if different than the applicant:**

   Name: **Naugatuck Environmental Technology LLC**

   Mailing Address: **500 Cherry St Ext**

   City/Town: **Naugatuck** State: **CT** Zip Code: **06770**

   Business Phone: **(203)723-1433** ext.: **4 2018**

   Contact Person: **Christopher Makuch** Phone: ext.

   *E-mail: **christopher.makuch@veolia.com**

   *By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject application. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes.

4. **Attorney or other Representative, if applicable:**

   Firm Name: **Fitzpatrick Mariano & Santos P.C.**

   Mailing Address: **203 Church street**

   City/Town: **Naugatuck** State: **CT** Zip Code: **06770**

   Business Phone: **203-729-4555** ext.:

   Attorney: **Edward Fitzpatrick** Phone: **203-729-1914** ext.

   E-mail:

5. **Site or Facility Owner, if different than the applicant:**

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person: Phone: ext.

   E-mail:

6. **Agent for Service of Owner, if applicable:**

   Name:

   Mailing Address:

   City/Town: State: Zip Code:

   Business Phone: ext.:

   Contact Person: Phone: ext.

   E-mail:

Part II: Applicant Information (continued)

7. **Engineer(s) or Consultant(s) employed or retained to assist in preparing the application:**

   Name: **Wright-Pierce**

   Mailing Address: **169 Main Street, 700 Plaza**

   City/Town: **Middletown** State: **CT** Zip Code: **06457**

   Business Phone: **(860) 852-1903** ext.:

   Contact Person: **Therlin Montgomery** Phone: **(860) 852-1903** ext.

   E-mail: **therlin.montgomery@wright-pierce.com**

   Service Provided: **permit preparation**

   ☐ Check here if additional sheets are necessary, and label and attach them to this sheet.

8. **List Authorized Representative signing this application:**

   Name: **Ronald Merancy**

   Effective Date of Authorization:

   Mailing Address: **229 Church St.**

   City/Town: **Naugatuck** State: **CT** Zip Code: **06770**

   Business Phone: **203-720-7071** ext.:

   E-mail: **publicworks@naugatuckct.gov**

Part III: Site Information

1. Site or Facility Name: **Naugatuck WPCF**

   Location of Site or Facility:

   Street Address: **500 Cherry Street ext**

   City/Town: **Naugatuck** State: **CT** Zip Code: **06770**

2. Identify the air quality attainment status of the area in which the facility is located by checking the appropriate box.

   Ozone Non-Attainment Area: ☒ Serious ☐ Severe

3. a. SIC Code: **4952** b. NAICS Code: **221310**

Part IV: Checklists for Applicable Requirements

The following pages contain applicable requirements checklists. They are included to help the applicant identify applicable requirements which include the State Implementation Plan (SIP), Federal Implementation Plan (FIP), 40 Code of Federal Regulations (CFR) 51, 52, 59, 60, 61, 62, 63, 64, 68, 70, 72-80, and 82.

SIP: Subsections of the Regulations of Connecticut State Agencies (RCSA) may be federally enforceable to the extent that such subsections are included in the SIP and are identical to the SIP.

A. RCSA Section 22a-174

Indicate which subsections of RCSA section 22a-174 are applicable by checking the appropriate box. If you checked non-applicable (N/A), you must provide the reason in the "Why" column. Refer to the instructions for the appropriate letter code. See DEEP Air Regulations.

Title of Subsection	Date of Last Revision	Apply	N/A	Why
1. Definitions	04/15/14	☐	☒	J
2. Registration requirements for existing stationary sources of air pollutants (repealed)				
2a. Procedural requirements for New Source Review and Title V permitting	09/10/12	☒	☐	
3. Permits to construct and permits to operate stationary sources or modifications (repealed)				
3a. Permit to Construct and Operate Stationary Sources	04/15/14	☒	☐	
3b. Exemptions from permitting for construction and operation of external combustion units, automotive refinishing operations, emergency engines, nonmetallic mineral processing equipment and surface coating operations	04/04/06	☐	☒	B
3c. Limitations on potential to emit for external combustion units, emergency engines, automotive refinishing operations, nonmetallic mineral processing equipment and surface coating operations	02/01/10	☒	☐	
4. Source monitoring, record keeping, and reporting	04/01/04	☒	☐	
5. Methods for sampling, emission testing, sample analysis, and reporting	04/15/14	☒	☐	
6. Air pollution emergency episode procedures	10/93	☒	☐	
7. Air pollution control equipment and monitoring equipment operation	04/01/04	☒	☐	
8. Compliance plans and schedules	09/10/12	☒	☐	
9. Prohibition of air pollution	12/83	☒	☐	
10. Public availability of information	12/83	☒	☐	
11. Prohibition against concealment or circumvention	12/83	☒	☐	
12. Violations and enforcement	12/83	☒	☐	
13. Variances	12/83	☒	☐	
14. Compliance with regulation no defense to nuisance claim	12/83	☒	☐	
15. Severability	12/83	☐	☒	J
16. Responsibility to comply with applicable regulations	12/83	☒	☐	
17. Control of open burning (repealed)				
18. Control of particulate matter and visible emissions	04/01/04	☒	☐	
19. Control of sulfur compound emissions	04/15/14	☒	☐	
19a. Control of sulfur dioxide emissions from power plants and other large stationary sources of air pollution	04/15/14	☐	☒	B
19b. Fuel sulfur content limitations for stationary sources	04/15/14	☐	☒	B
20. Control of organic compound emissions	03/07/14	☒	☐	
21. Control of carbon monoxide emissions (repealed)				
22. Control of nitrogen oxides emissions	06/03/13	☒	☐	
22a. The Nitrogen Oxides (NOx) Budget Program (repealed)				

Title of Subsection	Date of Last Revision	Apply	N/A	Why
22b. The Post-2002 Nitrogen Oxides (NOx) Budget Program (repealed)				
22c. The Clean Air Interstate Rule (CAIR) Nitrogen Oxides (NOx) Ozone Season Trading Program	09/04/07	☐	☒	B
23. Control of odors	04/04/06	☒	☐	
24. Connecticut primary and secondary standards	04/15/14	☒	☐	
25. Effective date (repealed)				
26. Fees	09/10/12	☒	☐	
27. Emission standards and on-board diagnostic II test requirements for periodic motor vehicle inspection and maintenance	08/10/09	☒	☐	
28. Oxygenated gasoline	04/15/14	☐	☒	B
29. Hazardous air pollutants	04/04/06	☒	☐	
30. Dispensing of Gasoline/Stage I and Stage II Vapor Recovery	05/10/04	☐	☒	E
31. Control of Carbon Dioxide Emissions/ Carbon Dioxide Budget Trading Program	12/09/13	☐	☒	E
31a. Greenhouse Gas Emissions Offset Projects	7/23/08	☐	☒	E
32. Reasonably Available Control Technology (RACT) for organic compounds	4/06/10	☐	☒	E
33. Title V Sources	01/28/11	☒	☐	
36. Low Emission Vehicles	12/04/04	☐	☒	E
36a. Heavy duty diesel engines (repealed)				
36b. Low Emission Vehicles II Program	08/01/13	☐	☒	B
36c. Low Emission Vehicles III Program	08/01/13	☐	☒	B
38. Municipal Waste Combustors	07/07/08	☐	☒	E
40. Consumer Products	06/12/09	☐	☒	E
41. Architectural and Industrial Maintenance Coatings	07/26/07	☐	☒	E
42. Distributed Generators	01/01/05	☐	☒	E
43. Portable Fuel Container Spillage Control (repealed)				
44. Adhesives and Sealants	10/03/08	☐	☒	E
100. Permits for construction of indirect sources (repealed)				
200. Deactivation of air pollution control systems or mechanisms from motor vehicles	12/83	☐	☒	J

B. 40 CFR Part 59 – National Volatile Organic Compound Emission Standards for Consumer and Commercial Products

Indicate which 40 CFR Part 59 Subparts are applicable by checking the appropriate box. If you checked non-applicable (N/A), you must provide the reason in the "Why" column. Refer to the instructions for the appropriate letter code. See 40 CFR Part 59.

Product Categories Subject to Federal Standards	40 CFR Part 59 Subpart	Apply	N/A	Why
Automobile Refinish Coatings	B	☐	☒	K
Consumer Products	C	☐	☒	K
Architectural Coatings	D	☐	☒	K
Aerosol Coatings	E	☐	☒	K
New and In-Use Portable Fuel Containers	F	☐	☒	K

C. 40 CFR Part 60 – Standards of Performance for New Stationary Sources

Indicate which 40 CFR Part 60 Subparts are applicable by checking the appropriate box. If you checked non-applicable (N/A), you must provide the reason in the "Why" column. Refer to the instructions for the appropriate letter code. See 40 CFR Part 60.

Source Categories Subject to Federal Performance Standards	40 CFR Part 60 Subpart	Apply	N/A	Why
Large Municipal Waste Combustors, constructed ≤ 9/20/94	Cb	☐	☒	B
Municipal Solid Waste Landfills	Cc	☐	☒	B
Sulfuric Acid Production Units	Cd	☐	☒	B
Hospital/Medical/Infectious Waste Incinerators	Ce	☐	☒	B
Fossil-Fuel-Fired Steam Generators	D	☐	☒	E
Electric Utility Steam Generating Units	Da	☐	☒	E
Industrial-Commercial-Institutional Steam Generating Units > 100MMBtu	Db	☐	☒	B
Small Industrial-Commercial-Institutional Steam Generating Units >10MMBtu but < 100MMBtu	Dc	☐	☒	B
Incinerators	E	☐	☒	E
Municipal Waste Combustors, constructed > 12/20/89, ≤ 9/20/94	Ea	☐	☒	B
Large Municipal Waste Combustors, constructed > 9/20/94, modification or reconstruction > 6/19/96	Eb	☐	☒	B
Hospital/Medical/Infectious Waste Incinerators, constructed > 6/20/96	Ec	☐	☒	B
Portland Cement Plants	F	☐	☒	B

Source Categories Subject to Federal Performance Standards	40 CFR Part 60 Subpart	Apply	N/A	Why
Nitric Acid Plants	G	☐	☒	B
Sulfuric Acid Plants	H	☐	☒	B
Hot Mix Asphalt Facilities	I	☐	☒	B
Petroleum Refineries	J	☐	☒	B
Petroleum Refineries, constructed, reconstructed or modified > 5/14/2007	Ja	☐	☒	B
Storage Vessels for Petroleum Liquids	K, Ka	☐	☒	B
Volatile Organic Liquid Storage Vessels (Including Petroleum Liquids)	Kb	☐	☒	E
Secondary Lead Smelters	L	☐	☒	B
Secondary Brass and Bronze Production Plants	M	☐	☒	B
Basic Oxygen Process Furnaces, Primary Emissions, constructed > 6/11/73	N	☐	☒	B
Basic Oxygen Process Steelmaking Facilities, Secondary Emissions, constructed >1/20/83	Na	☐	☒	B
Sewage Treatment Plants	O	☒	☐	
Primary Copper Smelters	P	☐	☒	B
Primary Zinc Smelters	Q	☐	☒	B
Primary Lead Smelters	R	☐	☒	B
Primary Aluminum Reduction Plants	S	☐	☒	B
Phosphate Fertilizer Industry	T, U, V, W, X	☐	☒	B
Coal Preparation and Processing Plants	Y	☐	☒	B
Ferroalloy Production Facilities	Z	☐	☒	B
Steel Plants	AA, AAa	☐	☒	B
Kraft Pulp Mills	BB	☐	☒	B
Glass Manufacturing Plants	CC	☐	☒	B
Grain Elevators	DD	☐	☒	B
Surface Coating of Metal Furniture	EE	☐	☒	B
Stationary Gas Turbines	GG	☐	☒	B
Lime Manufacturing Plants	HH	☐	☒	B
Lead-Acid Battery Manufacturing Plants	KK	☐	☒	B
Metallic Mineral Processing Plants	LL	☐	☒	B
Automobile and Light-Duty Truck Surface Coating Operations	MM	☐	☒	B
Phosphate Rock Plants	NN	☐	☒	B
Ammonium Sulfate Manufacture	PP	☐	☒	B
Graphic Arts Industry: Publication Rotogravure Printing	QQ	☐	☒	B
Pressure Sensitive Tape and Label Surface Coating Operations	RR	☐	☒	B
Industrial Surface Coating: Large Appliances	SS	☐	☒	B

Source Categories Subject to Federal Performance Standards	40 CFR Part 60 Subpart	Apply	N/A	Why
Metal Coil Surface Coating	TT	☐	☒	B
Asphalt Processing and Asphalt Roofing Manufacture	UU	☐	☒	B
Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	VV, VVa	☐	☒	B
Beverage Can Surface Coating Industry	WW	☐	☒	B
Bulk Gasoline Terminals	XX	☐	☒	B
New Residential Wood Heaters *	AAA*	☐	☒	B
Rubber Tire Manufacturing Industry	BBB	☐	☒	B
VOC Emissions from the Polymer Manufacturing Industry	DDD	☐	☒	B
Flexible Vinyl and Urethane Coating and Printing	FFF	☐	☒	B
Equipment Leaks of VOC in Petroleum Refineries	GGG, GGGa	☐	☒	B
Synthetic Fiber Production Facilities	HHH	☐	☒	B
VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes	III	☐	☒	B
Petroleum Dry Cleaners	JJJ	☐	☒	B
Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	KKK	☐	☒	B
Onshore Natural Gas Processing, SO_2 Emissions	LLL	☐	☒	B
VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations	NNN	☐	☒	B
Nonmetallic Mineral Processing Plants (Including Sand and Gravel Processing)	OOO	☐	☒	B
Wool Fiberglass Insulation Manufacturing Plants	PPP	☐	☒	B
VOC Emissions from Petroleum Refinery Wastewater Systems	QQQ	☐	☒	B
VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	RRR	☐	☒	B
Magnetic Tape Coating Facilities	SSS	☐	☒	B
Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	TTT	☐	☒	B
Calciners and Dryers in Mineral Industries	UUU	☐	☒	B
Polymeric Coating of Supporting Substrates Facilities	VVV	☐	☒	B
Municipal Solid Waste Landfills	WWW	☐	☒	B
Small Municipal Waste Combustion Units, constructed > 8/30/99 or modified or reconstructed > 6/6/2001	AAAA	☐	☒	B
Small Municipal Waste Combustion Units, constructed ≤ 8/30/99	BBBB	☐	☒	B
Commercial and Industrial Solid Waste Incineration Units, constructed > 11/30/99 or modified or reconstructed ≥ 6/1/2001	CCCC	☐	☒	B
Commercial and Industrial Solid Waste Incineration Units, constructed ≤ 11/30/99	DDDD	☐	☒	B

Source Categories Subject to Federal Performance Standards	40 CFR Part 60 Subpart	Apply	N/A	Why
Other Solid Waste Incinerator Units, constructed > 12/9/2004, or modified or reconstructed ≥ 6/16/2006	EEEE	☐	☒	B
Other Solid Waste Incinerator Units, constructed ≤ 12/9/2004	FFFF	☐	☒	B
Coal-Fired Electric Steam Generating Units	HHHH	☐	☒	B
Stationary Compression Ignition Internal Combustion Engines	IIII	☒	☐	
Stationary Spark Ignition Internal Combustion Engines	JJJJ	☐	☒	E
Stationary Combustion Turbines	KKKK	☐	☒	E
New Sewage Sludge Incineration Units	LLLL	☐	☒	E
Existing Sewage Sludge Incineration Units	MMMM	☒	☐	
Other:		☐	☐	
Other:		☐	☐	
Other:		☐	☐	
Other:		☐	☐	
Other:		☐	☐	

* According to RCSA section 22a-174-33(c)(2)(A), any premises that would be required to obtain a Title V permit solely because a stationary source on such premises is subject to 40 CFR Part 60 Subpart AAA, is currently exempt from Title V permitting.

D. 40 CFR PART 61- National Emission Standards for Hazardous Air Pollutants

Indicate which 40 CFR Part 61 Subparts are applicable by checking the appropriate box. If you checked non-applicable (N/A), you must provide the reason in the "Why" column. Refer to the instructions for the appropriate letter code. See 40 CFR Part 61.

Pollutant	Facility Or Emission Unit Type	40 CFR Part 61 Subpart	Apply	N/A	Why
Radon	Underground Uranium Mines; Department of Energy Facilities; Phosphogypsum Stacks; Phosphorus Fertilizer Plants; and Facilities Processing or Disposing of Uranium Mill Tailings; Operating Mill Tailings	B, Q, R, T, W	☐	☒	B
Beryllium	Beryllium Extraction Plants; Ceramic Plants, Foundries, Incinerators, Propellant Plants, and Machine Shops that Process Beryllium Containing Material; and Rocket Motor Firing Test Sites	C, D	☒	☐	
Mercury	Mercury Ore Processing; Manufacturing Processes Using Mercury Chloralkli Cells; and Sludge Incinerators	E	☒	☐	
Vinyl Chloride	Ethylene Dichloride Manufacturing Via Oxygen, Hcl and Ethylene; Vinyl Chloride Manufacturing; and Polyvinyl Chloride Manufacturing	F	☐	☒	B
Radio-nuclides	Department of Energy; Nuclear Regulatory Commission Licensed Facilities; Other Federal Facilities; and Elemental Phosphorus Plants	H, I*, K	☐	☒	B
Benzene	Fugitive Process, Storage, and Transfer Equipment Leak; Coke By-Product Recovery Plants; Benzene Storage Vessels; Benzene Transfer Operation; and Benzene Waste Operations	J, L, Y, BB, FF	☐	☒	B
Asbestos	Asbestos Mills; Roadway Surfacing with Asbestos Tailings; Manufacture of Products Containing Asbestos; Demolition; Renovation; and Spraying and Disposal of Asbestos Waste	M*	☐	☒	B
Inorganic Arsenic	Glass Manufacture; Primary Copper Smelter; Arsenic Trioxide and Metallic Arsenic Production Facilities	N, O, P	☐	☒	B
Volatile Hazardous Air Pollutants (VHAP)	Pumps, Compressors, Pressure Relief Devices, Connections, Valves, Lines, Flanges, Product Accumulator Vessels, Etc. in VHAP Service (As of 11/30/94 only vinyl chloride and benzene are regulated by 40 CFR Part 61, Subpart V)	V	☐	☒	B
Other:			☐	☐	

* According to RCSA sections 22a-174-33(c)(2)(B) and (D), any premises that would be required to obtain a Title V permit solely because a stationary source on such premises is subject to 40 CFR Part 61 Subpart M, Section 61.145 is currently exempt from Title V permitting.

E. 40 CFR Part 63 - Maximum Achievable Control Technology

Indicate which 40 CFR Part 63 Subparts are applicable by checking the appropriate box. If you checked non-applicable (N/A), you must provide the reason in the "Why" column. Refer to the instructions for the appropriate letter code. See 40 CFR Part 63.

Clean Air Act Amendments 1990 Title I, Part A, Section 112 (c)
(Source Categories by Alphabetical Order)

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Aerospace Industries	GG	09/01/1995 (60FR45948)	09/01/1998	☐	☒	B
Acrylic/Modacrylic Fiber (area sources)	LLLLLL (6L)	7/16/2007	--	☐	☒	B
Asphalt Processing & Asphalt Roofing Manufacturing	LLLLL	04/29/2003 (68FR22975)	05/01/2006	☐	☒	B
Auto & Light Duty Truck (surface coating)	IIII	04/26/04 (69FR22601)	04/26/2007	☐	☒	B
Auto Body Refinishing (area sources)	HHHHHH (6H)	01/09/2008 (73FR1737)	--	☐	☒	B
Boat Manufacturing	VVVV	08/22/2001 (66FR44217)	08/22/2004	☐	☒	B
Brick and Structural Clay Products Manufacturing Clay Ceramics Manufacturing	JJJJJ KKKKK	05/16/2003 (68FR26689)	05/16/2006	☐	☒	B
Carbon Black Production (area sources)	MMMMMM (6M)	07/16/2007 (72FR38864)	--	☐	☒	B
Cellulose Products Manufacturing • Miscellaneous Viscose Processes Cellulose Food Casing Rayon Cellulosic Sponge Cellophane • Cellulose Ethers Production Caroxymethyl Cellulose Methyl Cellulose Cellulose Ethers	UUUU	06/11/2002 (67FR40043)	06/11/2005	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Chemical Manufacturing Industry (area sources):CMAS	VVVVVV (6V)	10/29/09 (74FR56008)	--	☐	☒	4
Chemical Preparations Industry	BBBBBBB (7B)	12/30/2009 (74FR69193)	--	☐	☒	B
Chromium Compounds (area sources)	NNNNNN (6N)	07/16/2007 (72FR38864)	--	☐	☒	B
Chromium Electroplating • Chromic Acid Anodizing* • Decorative Chromium Electroplating* • Hard Chromium Electroplating*	N	01/25/1995 (60FR4948)	Deco 1/25/1996 Hard & Anodozing 01/25/1997	☐	☒	B
Clay Ceramics Manufacturing	KKKKK	05/16/2003 (68FR26689)	05/16/2006	☐	☒	B
Clay Ceramic Manufacturing (area sources)	RRRRRR (6R)	12/26/2007 (72FR73180)	12/26/2007	☐	☒	B
Coke Ovens: Charging, Top Side And Door Leaks	L	10/27/1993 (58FR57898)	Detailed in the rule	☐	☒	B
Coke Ovens: Pushing, Quenching, and Battery Stacks	CCCCC	04/14/2003 (68FR18007)	04/14/2006	☐	☒	B
Combustion Sources at Kraft, Soda and Sulfite Pulp & Paper Mills	MM	01/12/2001 (66FR3180)	01/12/2004	☐	☒	B
Commercial Sterilizers • Commercial Sterilization Facilities*	O	12/06/1994 (59FR62585)	12/06/1998	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Dry Cleaning • Commercial Drycleaning (Perchloroethylene) - Dry-to-Dry Machines* • Commercial Drycleaning (Perchloroethylene) - Transfer Machines* • Industrial Drycleaning (Perchloroethylene) - Dry-to-Dry Machines • Industrial Drycleaning (Perchloroethylene) - Transfer Machines	M	09/22/1993 (58FR49354)	09/23/1996	☐	☒	B
Electric Arc Furnace Steelmaking Facilities (area sources)	YYYYY	12/28/2007 (72FR74088)	6/30/2008	☐	☒	B
Engine Test Cells/Stands (Combined with the Rocket Testing Facilities)	PPPPP	05/27/2003 (68FR28774)	--	☐	☒	B
Fabric Printing, Coating & Dyeing	OOOO	5/29/2003 (68FR32171)	5/29/2006	☐	☒	B
Ferroalloys Production (major sources)	XXX	05/20/1999 (64FR27450)	05/20/2001	☐	☒	B
Ferroalloys Production (area sources)	YYYYYY (6Y)	12/23/2008 (73FR78637)	12/23/2011	☐	☒	B
Flexible Polyurethane Foam Fabrication Operation	MMMMM	04/14/2003 (68FR18061)	04/14/2004	☐	☒	B
Flexible Polyurethane Foam Production and Fabrication (area sources)	III	10/07/1998 (63FR53980)	10/08/2001	☐	☒	B
Friction Products Manufacturing	QQQQQ	10/18/2002 (67FR64497)	10/18/2005	☐	☒	B
Gasoline Dispensing Facilities (area sources)	CCCCCC (6C)	01/10/2008 (73FR1916)	01/10/2011	☐	☒	E
Gasoline Distribution - Stage I	R	12/14/1994 (59FR64303)	12/15/1997	☐	☒	E

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities (area sources)	BBBBBB (6B)	01/10/2008	01/10/2011	☐	☒	B
General Provisions	A	--	--	☒	☐	
Generic MACT I • Acetal Resins Production • Hydrogen Fluoride Production • Polycarbonates Production • Acrylic Fibers/Modacrylic Fibers Production	YY UU	06/29/1999 (64FR34853)	06/29/2002	☐	☒	B
Generic MACT II • Carbon Black Production • Ethylene Processes • Spandex Production	YY UU	07/12/2002 (67FR46289)	07/12/2005	☐	☒	B
Glass Manufacturing (area sources)	SSSSSS (6S)	12/26/2007 (72FR73180)	12/26/09 or upon startup	☐	☒	B
Gold Mine Ore Processing and Production (area sources)	EEEEEEE (7E)	2/17/2011 (FR769450)	2/17/2014	☐	☒	B
Halogenated Solvent Cleaners* not on list	T	12/02/1994 (59FR61801)	12/02/1997	☐	☒	B
Hazardous Organic NESHAP Including: Synthetic Organic Chemical Manufacturing Industry (including Dodecanedioic Acid Production (S), Tetrahydrobenzaldehyde Production previously known as Butadiene Dimers Production (S))	F, G, H, I	04/22/1994 (59FR19402)	F/G-05/14/2001 H-05/12/1999 New Sources 05/12/1998	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Hazardous Waste Incineration*	EEE Parts 63, 261 and 270	09/30/1999 (64FR52827)	09/30/2003	☐	☒	B
Hospitals: Ethylene Oxide Sterilizers (area sources)	WWWWW	12/28/2007 (72FR73611)	12/28/2007 (new sources) 12/28/2008 (existing sources)	☐	☒	B
Hydrochloric Acid Production Including: Fumed Silica Production	NNNNN	04/17/2003 (68FR19075)	04/17/2006	☐	☒	B
Industrial, Commercial and Institutional Boilers and Process Heaters – Major Sources	DDDDD	09/13/2007 (69FR52217)	09/13/2007	☐	☒	B
Industrial, Commercial and Institutional Boilers and Process Heaters – Area Sources	JJJJJJ (6J)	09/13/2007 (69FR52217)	09/13/2007	☐	☒	B
Industrial Cooling Towers	Q	09/08/1994 (59FR46339)	03/08/1995	☐	☒	B
Integrated Iron & Steel Manufacturing	FFFFF	05/20/2003 (68FR27645)	05/20/2006	☐	☒	B
Iron & Steel Foundries (area sources)	ZZZZZ	01/02/2008 (73FR225)	01/02/2011	☐	☒	B
Iron & Steel Foundries (Major Sources)	EEEEE	4/22/2004 (69FR21905)	4/22/2007	☐	☒	B
Large Appliance (Surface Coating)	NNNN	07/23/2002 (67FR48253)	07/23/2005	☐	☒	B
Lead Acid Battery Manufacturing (area sources)	PPPPPP (6P)	07/16/2007	--	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Leather Finishing Operations	TTTT	02/27/2002 (67FR915510)	02/27/2005	☐	☒	B
Lime Manufacturing	AAAAA	01/05/04 (69FR393)	01/05/2007	☐	☒	B
Magnetic Tape (Surface Coating)	EE	12/15/1994 (59FR64580)	w/o new control devices- 12/15/1996 w/new control devices-12/15/1997	☐	☒	B
Manufacturing Nutritional Yeast (formerly Baker's Yeast)	CCCC	05/21/2001 (66FR27876)	05/21/2004	☐	☒	B
Marine Vessel Loading Operations	Y	09/19/1995 (60FR48388)	MACT- 09/19/1999 RACT-09/19/1998	☐	☒	B
Mercury Cell Chlor-Alkali Plants	IIIII	12/19/2003 (68FR70903)	12/19/2006	☐	☒	B
Metal Can (Surface Coating)	KKKK	11/13/2003 (68FR64431)	11/13/2006	☐	☒	B
Metal Coil (Surface Coating)	SSSS	06/10/2002 (67FR39793)	06/10/2005	☐	☒	B
Metal Fabrication and Finishing Source Nine Categories (area sources)	XXXXXX (6X)	07/25/2008 (73FR42978)	07/25/2011	☐	☒	B
Metal Furniture (Surface Coating)	RRRR	05/23/2003 (68FR28605)	05/23/2006	☐	☒	B
Mineral Wool Production	DDD	06/01/1999 (64FR29489)	06/01/2002	☐	☒	B
Miscellaneous Coating Manufacturing	HHHHH	12/11/2003 (68FR69163)	12/11/2006	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Miscellaneous Metal Parts & Production (Surface Coating) Including : Asphalt / Coal Tar Application - Metal Pipes (S)	MMMM	01/02/2004 (69FR129)	01/02/2007	☐	☒	B
Miscellaneous Organic Chemical Production & Processes (MON) • Alkyd Resins Production • Ammonium Sulfate Production - Caprolactam by-product plants • Benzyltrimethylammonium Chloride Production • Carbonyl Sulfide Production • Chelating Agents Production • Ethyldene Norbonene Production • Explosives Production • Hydrazine Production • Maleic Anhydride Copolymers Production • Manufacture of Paints, Coatings & Adhesives • OBPA / 1,3-Diisocyante Production • Photographic Chemicals Production • Phthalate Plasticizers Production • Polyester Resins Production • Polymerized Vinylidene Chloride Production • Polymethyl Methacrylate Resins Production • Polyvinyl Acetate Emulsions Production • Polyvinyl Alcohol Production • Polyvinyl Butyral Production • Quaternary Ammonium Compounds Production • Rubber Chemicals Manufacturing • Symmetrical Tetrachloropyridine Production	FFFF	11/10/2003 (68FR63851)	05/10/2008	☐	☒	B
Municipal Solid Waste Landfills (formerly Municipal Landfills) (the rule applies to some area sources too)	AAAA	01/16/2003 (68FR2227)	--	☐	☒	B
Natural Gas Transmission and Storage	HHH	06/17/1999 (64FR32610)	06/17/2002	☐	☒	B
Nonferrous Foundries: Aluminum, Copper and Other (area sources)	ZZZZZZ (6Z)	06/25/2009 (74FR30366)	Existing sources 06/27/2011 New sources upon startup	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Off-Site Waste and Recovery Operations	DD	07/01/1996 (61FR34140)	02/01/2000	☐	☒	B
Oil and Natural Gas Production includes area sources	HH	06/17/1999 (64FR32609)	06/17/2002	☐	☒	B
Organic Liquids Distribution (Non-Gasoline)	EEEE	02/03/2004 (69FR5038)	02/03/2007	☐	☒	B
Paint Stripping and Miscellaneous Surface Coating Operations (area sources)	HHHHHH (6H)	01/09/2008 (73FR1737)	--	☐	☒	B
Paper and other Web (Surface Coating)	JJJJ	12/04/2002 (65FR72341)	12/04/2005	☐	☒	B
Pesticide Active Ingredient Production • 4-Chloro-2-Methyl Acid (S) • 2,4 Salts & Esters Production (S) • 4,6-dinitro-o-cresol Production (S) • Butadiene Furfural Cotrimer (S) • Captafol Production (S) • Captan Production (S) • Chloroneb Production (S) • Chlorothalonil Production (S) • Dacthal ™ Production (S) • Sodium Pentachlorophenate Production (S) • Tordon ™ Acid Production (S)	MMM	06/23/1999 (64FR33549)	12/23/2003	☐	☒	B
Petroleum Refineries – Catalytic Cracking, Catalytic Reforming Units, and Sulfur Recovery Units (formerly Petroleum Refineries – Catalytic Cracking (Fluid and Other) Units, Catalytic Reforming Units, and Sulfur Plant Units)	UUU	04/11/2002 (67FR17761)	04/11/2005	☐	☒	B
Petroleum Refineries – Other sources not distinctly listed	CC	08/18/1995 (60FR43244)	08/18/1998	☐	☒	B
Pharmaceuticals Production	GGG	09/21/1998 (63FR50280)	09/21/2001	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Phosphoric Acid Manufacturing Phosphate Fertilizers Production	AA BB	6/10/1999 (64FR31358)	06/10/2002	☐	☒	B
Plastic Parts (Surface Coating)	PPPP	04/19/2004 (69FR20968)	04/19/2007	☐	☒	B
Plating and Polishing Operations (area sources)	WWWWWW (6W)	07/01/2008 (73FR37728)	07/01/2010	☐	☒	B
Plywood and Composite Wood Products (formerly Plywood/Particle Board Manufacturing)	DDDD	07/30/2004 (69FR45943)	--	☐	☒	B
Polyether Polyols Production	PPP	06/01/1999 (64FR29419)	06/01/2002	☐	☒	B
Polymers & Resins I • Butyl Rubber Production • Epichlorohydrin Elastomers Production • Ethylene-Propylene Rubber Production • Hypalon (TM) Production • Neoprene Production • Nitrile Butadiene Rubber Production • Polybutadiene Rubber Production • Polysulfide Rubber Production • Styrene-Butadiene Rubber and Latex Production	U	09/05/1996 (61FR46905)	07/31/1997	☐	☒	B
Polymers & Resins II • Epoxy Resins Production • Non-nylon Polyamides Production	W	03/08/1995 (60FR12670)	03/03/1998	☐	☒	B
Polymers & Resins III • Amino Resins Production • Phenolic Resins Production	OOO	01/20/2000 (65FR3275)	01/20/2003	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Polymers & Resins IV • Acrylonitrile-Butadiene-Styrene Production • Methyl Methacrylate-Acrylonitrile-Styrene Production • Methyl Methacrylate-Butadiene-Styrene Production • Polystrene • Nitrile Resins Production • Polyethylene Terephthalate Production • Styrene-Acrylonitrile Production	JJJ	09/12/1996 (61FR48208)	07/31/1997	☐	☒	B
Polyvinyl Chloride and Copolymers Production	J	07/10/2002 (67FR45885)	07/10/2005	☐	☒	B
Polyvinyl Chloride and Copolymers Production (area sources)	DDDDDD (6D)			☐	☒	B
Portland Cement Manufacturing*	LLL	06/14/1999 (64FR31897)	06/10/2002	☐	☒	B
Primary Aluminum Production	LL	10/07/1997 (62FR52383)	10/07/1999	☐	☒	B
Primary Copper	QQQ	06/12/2002 (67FR40477)	06/12/2005	☐	☒	B
Primary Copper Smelting (area sources)	EEEEEE (6E)	01/23/2007 (64FR30194)	--	☐	☒	B
Primary Lead Smelting	TTT	06/04/1999 (64FR30194)	05/04/2001	☐	☒	B
Primary Magnesium Refining	TTTTT	10/10/2003 (68FR58615)	10/11/2004	☐	☒	B
Primary Nonferrous Metals – Zinc, Cadmium and Beryllium (area sources)	GGGGGG (6G)	01/23/2007 (72FR2930)	--	☐	☒	B
Printing/Publishing (Surface Coating)	KK	05/30/1996 (61FR27132)	05/30/1999	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Publicly Owned Treatment Works (POTW)	VVV	10/26/1999 (64FR57572)	10/26/2002	☒	☐	
Pulp & Paper Production (Non-Combust) MACT I	S	04/15/1998 (63FR18504) 03/08/1996 (61FR9383)	04/15/2001 04/16/2001	☐	☒	B
Reciprocating Internal Combustion Engines (RICE) includes area sources	ZZZZ	06/15/2004 (69FR33473)	06/15/2007	☒	☐	
Refactory Products Manufacturing	SSSSS	04/16/2003 (68FR18729)	New or Reconstructed 04/16/2003 Existing 04/17/2006	☐	☒	B
Reinforced Plastic Composites Production	WWWW	04/21/2003 (68FR19375)	04/21/2006	☐	☒	B
Rubber Tire Manufacturing	XXXX	07/09/2002 (67FR45598)	07/11/2005	☐	☒	B
Secondary Aluminum Production*	RRR	03/23/2000 (65FR15689)	Existing sources 03/24/2003 New sources 03/23/2000 or startup	☐	☒	B
Secondary Copper Smelting (area sources)	FFFFFF (6F)	01/23/2007 (72FR2930)	--	☐	☒	B
Secondary Lead Smelters	X	06/23/1995 (60FR32587)	06/23/1997	☐	☒	B
Secondary Nonferrous Metals Processing (Brass, Bronze, Magnesium and Zinc) (area sources)	TTTTTT (6T)	12/26/2007 (72FR73180)	Existing sources 12/26/2007 new sources upon startup	☐	☒	B
Semiconductor Manufacturing	BBBBB	05/22/2003 (68FR27913)	05/22/2006	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Shipbuilding and Ship Repair (Surface Coating)	II	12/15/1995 (60FR64330)	12/16/1996	☐	☒	B
Site Remediation	GGGGG	10/08/2003 (68FR58171)	10/08/2006	☐	☒	B
Solvent Extraction for Vegetable Oil Production (formerly Vegetable Oil Production)	GGGG	04/12/2001 (66FR19006)	04/12/2004	☐	☒	B
Stationary Combustion Turbines	YYYY	03/05/2004 (69FR10511)	03/05/2007	☐	☒	B
Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants	CCC	06/22/1999 (64FR33202)	06/22/2001	☐	☒	B
Taconite Iron Ore Processing	RRRRR	10/30/2003	10/30/2006	☐	☒	B
Tetrahydrobenzaldehyde Manufacture (formerly Butadiene Dimers production)	F	05/12/1998	05/12/2001	☐	☒	B
Utility NESHAP	UUUUU			☐	☒	B
Wet Formed Fiberglass Mat Production	HHHH	04/11/2002 (67FR17823)	04/11/2005	☐	☒	B
Wood Building Products (Surface Coating) (formerly Flat Wood Paneling Products)	QQQQ	05/28/2003 (68FR31745)	05/28/2006	☐	☒	B
Wood Furniture (Surface Coating)	JJ	12/07/1995 (60FR62930)	11/21/1997	☐	☒	B
Wood Preserving (area sources)	QQQQQQ (6Q)	07/16/2007 (72FR38864)	--	☐	☒	B
Wool Fiberglass Manufacturing	NNN	06/14/1999 (64FR31695)	06/14/2002	☐	☒	B

Source Category	40 CFR Part 63 Subpart	Final Federal Register Date & Citation	Compliance Date	Apply	N/A	Why
Other:				☐	☐	
Other:				☐	☐	
Other:				☐	☐	
Other:				☐	☐	
Other:				☐	☐	

* Denotes area and point source categories
(S) Denotes subsumed source category

F. 40 CFR Part 68 – Chemical Accident Prevention Provisions

Regulated Toxic Substances and Threshold Quantities for Accidental Release Prevention

If the facility produces, processes, stores or uses any of the substances, in excess of the threshold listed in the following table, it may be subject to the requirements regulated under Section 112(r) of the Clean Air Act.

Indicate which 40 CFR Part 68 toxic substances are emitted at or above the threshold quantity listed by checking the appropriate box. See Table 1 to 40 CFR §68.130.

Toxic Substances in Alphabetical Order (77)

Chemical Name	CAS No.	Threshold Quantity (lbs)	Apply	N/A
Acrolein [2-Propenal]	107-02-8	5,000	☐	☒
Acrylonitrile [2-Propenenitirle]	107-13-1	20,000	☐	☒
Acrylyl chloride [2-Propenoyl chloride]	814-68-6	5,000	☐	☒
Allyl alcohol [2-Propen-l-ol]	107-18-61	15,000	☐	☒
Allylamine [2-Propen-l-amine]	107-11-9	10,000	☐	☒
Ammonia (anhydrous)	7664-41-7	10,000	☐	☒
Ammonia (conc 20% or greater)	7664-41-7	20,000	☐	☒
Arsenous trichloride	7784-34-1	15,000	☐	☒
Arsine	7784-42-1	1,000	☐	☒
Boron trichloride [Borane, trichloro-]	10294-34-5	5,000	☐	☒
Boron trifluoride [Borane, trifluoro-]	7637-07-2	5,000	☐	☒
Boron trifluoride compound with methyl ether (1:1) [Boron, trifluoro[oxybis[methane]]-, T-4-	353-42-4	15,000	☐	☒
Bromine	7726-95-6	10,000	☐	☒
Carbon disulfide	75-15-0	20,000	☐	☒
Chlorine	7782-50-5	2,500	☐	☒
Chlorine dioxide [Chlorine oxide (ClO2)]	10049-04-4	1,000	☐	☒
Chloroform [Methane, trichloro-]	67-66-3	20,000	☐	☒
Chloromethyl ether [Methane, oxybis[chloro-]	542-88-1	1,000	☐	☒
Chloromethyl methyl ether [Methane, chloromethoxy-]	107-30-2	5,000	☐	☒
Crotonaldehyde [2-Butenal]	4170-30-3	20,000	☐	☒
Crotonaldehyde, (E)- [2-Butenal, (E)-]	123-73-9	20,000	☐	☒
Cyanogen chloride	506-77-4	10,000	☐	☒
Cyclohexylamine [Cyclohexanamine]	108-91-8	15,000	☐	☒
Diborane	19287-45-7	2,500	☐	☒
Dimethyldichlorosilane [Silane, dichlorodimethyl-]	75-78-5	5,000	☐	☒
1,1-Dimethylhydrazine [Hydrazine, 1, 1-dimethyl-]	57-14-7	15,000	☐	☒
Epichlorohydrin [Oxirane, (chloromethyl)-]	106-89-8	20,000	☐	☒
Ethylendiamine [1,2-Ethanediamine]	107-15-3	20,000	☐	☒

Chemical Name	CAS No.	Threshold Quantity (lbs)	Apply	N/A
Ethyleneimine [Aziridine]	151-56-4	10,000	☐	☒
Ethylene oxide [Oxirane]	75-21-8	10,000	☐	☒
Fluorine	7782-41-4	1,000	☐	☒
Formaldehyde (solution)	50-00-0	15,000	☐	☒
Furan	110-00-9	5,000	☐	☒
Hydrazine	302-01-2	15,000	☐	☒
Hydrochloric acid (concentration 37% or greater)	7647-01-0	15,000	☐	☒
Hydrocyanic acid	74-90-8	2,500	☐	☒
Hydrogen chloride (anhydrous) [Hydrochloric acid]	7647-01-0	5,000	☐	☒
Hydrogen fluoride/Hydrofluoric acid (conc 50% or greater) [Hydrofluoric acid]	7664-39-3	1,000	☐	☒
Hydrogen selenide	7783-07-5	500	☐	☒
Hydrogen sulfide	7783-06-4	10,000	☐	☒
Iron, pentacarbonyl- [Iron carbonyl ($Fe(CO)_5$), (TB-5-11)-]	13463-40-6	2,500	☐	☒
Isopropyl chloroformate [Carbonochloridic acid, 1-methylethyl ester]	108-23-6	15,000	☐	☒
Methacrylonitrile [2-Propenenitrile, 2-methyl-]	126-98-7	10,000	☐	☒
Methyl chloride [Methane, chloro-]	74-87-3	10,000	☐	☒
Methyl chloroformate [Carbonochloridic acid, methylester]	79-22-1	5,000	☐	☒
Methyl hydrazine [Hydrazine, methyl-]	60-34-4	15,000	☐	☒
Methyl isocyanate [Methane, isocyanato-]	60-83-9	10,000	☐	☒
Methyl mercaptan [Methanethiol]	74-93-1	10,000	☐	☒
Methyl thiocyanate [Thiocyanic acid, methyl ester]	556-64-9	20,000	☐	☒
Methyltrichlorosilane [Silane, trichloromethyl-]	75-79-6	5,000	☐	☒
Nickel carbonyl	13463-39-3	1,000	☐	☒
Nitric acid (conc 80% or greater)	7697-37-2	15,000	☐	☒
Nitric oxide [Nitrogen oxide (NO)]	10102-43-9	10,000	☐	☒
Oleum (Fuming Sulfuric acid) [Sulfuric acid, mixture with sulfur trioxide] {1}	8014-95-7	10,000	☐	☒
Peracetic acid [Ethaneperoxoic acid]	79-21-0	10,000	☐	☒
Perchloromethylmercaptan [Methanesulfenyl chloride, trichloro-]	594-42-3	10,000	☐	☒
Phosgene [Carbonic dichloride]	75-44-5	500	☐	☒
Phosphine	7803-51-2	5,000	☐	☒
Phosphorus oxychloride [Phosphoryl chloride]	10025-87-3	5,000	☐	☒
Phosphorus trichloride [Phosphorus trichloride]	7719-12-2	15,000	☐	☒
Piperidine	110-89-4	15,000	☐	☒
Propionitrile [Propanenitrile]	107-12-0	10,000	☐	☒

Chemical Name	CAS No.	Threshold Quantity (lbs)	Apply	N/A
Propyl chloroformate [Carbonochloridic acid, propylester]	109-61-5	15,000	☐	☒
Propyleneimine [Aziridine, 2-methyl-]	75-55-8	10,000	☐	☒
Propylene oxide [Oxirane, methyl-]	75-56-9	10,000	☐	☒
Sulfur dioxide (anhydrous)	7446-09-5	5,000	☐	☒
Sulfur tetrafluoride [Sulfur fluoride (SF_4), (T-4)-]	7783-60-0	2,500	☐	☒
Sulfur trioxide	7446-11-9	10,000	☐	☒
Tetramethyllead [Plumbane, tetramethyl-]	75-74-1	10,000	☐	☒
Tetranitromethane [Methane, tetranitro-]	509-14-8	10,000	☐	☒
Titanium tetrachloride [Titanium chloride ($TiCl_4$) (T-4-]	7550-45-0	2,500	☐	☒
Toluene 2,4-diioscyanate [Benzene, 2,4-diioscyanato-l-methyl-] {1}	584-84-9	10,000	☐	☒
Toluene 2,6-diioscyanate [Benzene, 1,3-diioscyanato-2-methyl-] {1}	91-08-7	10,000	☐	☒
Toluene diioscyanate (unspecified isomer) [Benzene, 1,3-diioscyanatomethyl-] {1}	26471-62-5	10,000	☐	☒
Trimethylchlorosilane [Silane, chlorotrimethyl-]	75-77-4	10,000	☐	☒
Vinyl acetate monomer [Acetic acid ethenyl ester]	108-05-4	15,000	☐	☒

G. 40 CFR Part 68 – Chemical Accident Prevention Provisions

Regulated Flammable Substances and Threshold Quantities for Accidental Release Prevention

If the facility produces, processes, stores or uses any of the substances, in excess of the threshold listed in the following table, it may be subject to the requirements regulated under Section 112(r) of the Clean Air Act.

Indicate which 40 CFR Part 68 substances are emitted at or above the threshold quantity listed by checking the appropriate box. See Table 3 to 40 CFR §68.130.

Flammable Substances in Alphabetical Order (63)

Chemical Name	CAS No.	Threshold Quantity (lbs)	Apply	N/A
Acetaldehyde	75-07-0	10,000	☐	☒
Acetylene [Ethylene]	74-86-2	10,000	☐	☒
Bromotrifluoroethylene [Ethene, bromotrifluoro-]	598-73-2	10,000	☐	☒
1,3-Butadiene	106-99-0	10,000	☐	☒
Butane	106-97-8	10,000	☐	☒
1-Butene	106-98-9	10,000	☐	☒
2-Butene	107-01-7	10,000	☐	☒
Butene	25167-67-3	10,000	☐	☒
2-Butene-cis	590-18-1	10,000	☐	☒
2-Butene-trans [2-Butene, (E)]	624-64-6	10,000	☐	☒
Carbon oxysulfide [Carbon oxide sulfide (COS)]	463-58-1	10,000	☐	☒

Chemical Name	CAS No.	Threshold Quantity (lbs)	Apply	N/A
Chlorine monoxide [Chlorine oxide]	7791-21-1	10,000	☐	☒
2-Chloropropylene [1-Propene, 2-chloro-]	557-98-2	10,000	☐	☒
1-Chloropropylene [1-Propene, 1-chloro-]	509-21-6	10,000	☐	☒
Cyanogen [Ethanedinitrile]	460-19-5	10,000	☐	☒
Cyclopropane	75-19-4	10,000	☐	☒
Dichlorosilane [Silane, dichloro-]	4109-96-0	10,000	☐	☒
Difluoroethane [Ethane, 1, 1-difluoro-]	75-37-6	10,000	☐	☒
Dimethylamine [Methanamine, N-methyl-]	124-40-3	10,000	☐	☒
2,2-Dimethylpropane [Propane, 2,2-dimethyl-]	463-82-1	10,000	☐	☒
Ethane	74-84-0	10,000	☐	☒
Ethyl acetylene [1-Butyne]	107-00-6	10,000	☐	☒
Ethylamine [Ethanamine]	75-04-7	10,000	☐	☒
Ethyl chloride [Ethane, chloro-]	75-00-3	10,000	☐	☒
Ethylene [Ethene]	74-85-1	10,000	☐	☒
Ethyl ether [Ethane, 1,1-'-oxybis-]	60-29-7	10,000	☐	☒
Ethyl mercaptan [Ethanethiol]	75-08-1	10,000	☐	☒
Ethyl nitrite [Nitrous acid, ethyl ester]	109-95-5	10,000	☐	☒
Hydrogen	1333-74-0	10,000	☐	☒
Isobutane [Propane, 2-methyl]	75-28-5	10,000	☐	☒
Isopentane [Butane, 2-methyl-]	78-78-4	10,000	☐	☒
Isoprene [1,3-Butadinene, 2-methyl-]	78-79-5	10,000	☐	☒
Isopropylamine [2-Propanamine]	75-31-0	10,000	☐	☒
Isopropyl chloride [Propane, 2-chloro-]	75-29-6	10,000	☐	☒
Methane	74-82-8	10,000	☐	☒
Methylamine [Methanamine]	74-89-5	10,000	☐	☒
3-Methyl-l-butene	563-45-1	10,000	☐	☒
Methyl formate [Formic acid, methyl ester]	107-31-3	10,000	☐	☒
2-Methylpropene [1-Propene, 2-methyl-]	115-11-7	10,000	☐	☒
1,3-Pentadinene	504-60-9	10,000	☐	☒
Pentane	109-66-0	10,000	☐	☒
1-Pentene	109-67-1	10,000	☐	☒
2-Pentene, (E)-	646-04-8	10,000	☐	☒
2-Pentene, (Z)-	627-20-3	10,000	☐	☒
Propadiene [1,2-Propadiene]	463-49-0	10,000	☐	☒
Propane	74-98-6	10,000	☐	☒
Propylene [1,2-Propene]	115-07-1	10,000	☐	☒

Chemical Name	CAS No.	Threshold Quantity (lbs)	Apply	N/A
Propyne [1-Propyne]	74-99-7	10,000	☐	☒
Silane	7803-62-5	10,000	☐	☒
Tetrafluoroethylene [Ethene, tetrafluoro-]	116-14-3	10,000	☐	☒
Tetramethylsilane [Silane, tetramethyl-]	75-76-3	10,000	☐	☒
Trichlorosilane [Silane, trichloro-]	10025-78-2	10,000	☐	☒
Trifluorochloroethylene [Ethene, chlorotrifluoro-]	79-38-9	10,000	☐	☒
Trimethylamine [Methanamine, N,N-dimethyl-]	75-50-3	10,000	☐	☒
Vinyl acetylene [1-Buten-3-yne]	689-97-4	10,000	☐	☒
Vinyl chloride [Ethene, chloro-]	75-01-4	10,000	☐	☒
Vinyl ethyl ether [Ethene, ethoxy-]	109-92-2	10,000	☐	☒
Vinyl fluoride [Ethene, fluoro-]	75-02-5	10,000	☐	☒
Vinylidene chloride [Ethene, 1,1-dichloro-]	75-35-4	10,000	☐	☒
Vinylidene fluoride [Ethene, 1,1-difluoro-]	75-38-7	10,000	☐	☒
Vinyl methyl ether [Ethene, methoxy-]	107-25-5	10,000	☐	☒

H. 40 CFR PARTS 72-78 – Acid Rain Requirements

Check the appropriate boxes to determine 40 CFR Parts 72-78 applicability.

Does the facility burn fossil fuel and generate electricity for wholesale or retail sale, such as a co-generation facility, a qualifying facility (as defined in the Federal Power Act), independent power producer, or solid waste incinerator?

☒ No If no, the facility **is not** subject to Acid Rain Requirements.

☐ Yes If Yes, the facility **may be** subject to Acid Rain Requirements and an acid rain permit application must be completed. For more information, contact the Bureau of Air Management, Engineering Section at 860-424-4152.

I. 40 CFR Part 82 - Class I and Class II Controlled Substances

Appendix A and B to 40 CFR Part 82 Subpart A

If the facility produces, processes, stores or uses any of the Class I Controlled Substances listed in the following tables, it may be subject to the requirements regulated under 40 CFR Part 82. Compliance with the standards for recycling and emissions reduction of products using ozone depleting substances is required pursuant to 40 CFR Part 82 Subpart F. Review the following list to determine 40 CFR Part 82 applicability. See 40 CFR Part 82.

A. Class I Group I

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
$CFCl_3$ - Trichlorofluoromethane (CFC-11)	1.0	☐	☒
CF_2Cl_2 - Dichlorofifluoromethane (CFC-12	1.0	☐	☒
$C_2F_3Cl_3$ - Trichlorotrifluoroethane (CFC-113)	0.8	☐	☒
$C_2F_4Cl_2$ - Dichlorotetrafluoroethane (CFC-114)	1.0	☐	☒
C_2F_5Cl - Monochloropentafluoroethane (CFC-115)	0.6	☐	☒
All isomers of the above chemicals		☐	☒

B. Class I Group II

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
CF_2ClBr - Bromochlorodifluoromethane (Halon-1211)	3.0	☐	☒
CF_3Br - Bromotrifluoromethane (Halon-1301)	10.0	☐	☒
C_2F4Br_2 - Dibromotetrafluoroethane (Halon-2402)	6.0	☐	☒
All isomers of the above chemicals		☐	☒

C. Class I Group III

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
CF_3Cl - Chlorotrifluoromethane (CFC-13)	1.0	☐	☒
C_2FCl_5 - (CFC-111)	1.0	☐	☒
$C_2F_2Cl_4$ - (CFC-112)	1.0	☐	☒
C_3FCl_7 - (CFC-211)	1.0	☐	☒
$C_3F_2Cl_6$ - (CFC-212)	1.0	☐	☒
$C_3F_3Cl_5$ - (CFC-213)	1.0	☐	☒
$C_3F_4Cl_4$ - (CFC-214)	1.0	☐	☒
$C_3F_5Cl_3$ - (CFC-215)	1.0	☐	☒
$C_3F_6Cl_2$ - (CFC-216)	1.0	☐	☒
C_3F_7Cl - (CFC-217)	1.0	☐	☒
All isomers of the above chemicals		☐	☒

D. Class I Group IV

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
CCl_4 - Carbon Tetrachloride	1.1	☐	☒

E. Class I Group V

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
$C_2H_3Cl_3$ - 1,1,1 Trichloroethane (Methyl chloroform)	0.1	☐	☒
All isomers of the above chemical except, 1,1,2-trichloroethane		☐	☒

F. Class I Group VI

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
CH_3Br - Bromomethane (Methyl Bromide)	0.7	☐	☒

G. Class I Group VII

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
$CHFBr_2$	1.00	☐	☒
CHF_2Br (HBFC-2201)	0.74	☐	☒
CH_2FBr	0.73	☐	☒
C_2HFBr_4	0.3-0.8	☐	☒
$C_2HF_2Br_3$	0.5-1.8	☐	☒
$C_2HF_3Br_2$	0.4-1.6	☐	☒
C_2HF_4Br	0.7-1	☐	☒
$C_2H_2FBr_3$	0.1-1.1	☐	☒
$C_2H_2F_2Br_2$	0.2-1.5	☐	☒
$C_2H_2F_3Br$	0.7-1.6	☐	☒
$C_2H_2FBr_2$	0.1-1.7	☐	☒
$C_2H_3F_2Br$	0.2-1.1	☐	☒
C_2H_4FBr	0.07-0.1	☐	☒
C_3HFBr_6	0.3-1.5	☐	☒
$C_3HF_2Br_5$	0.2-1.9	☐	☒
$C_3HF_3Br_4$	0.3-1.8	☐	☒
$C_3HF_4Br_3$	0.5-2.2	☐	☒
$C_3HF_5Br_2$	0.9-2.0	☐	☒
C_3HF_6Br	0.7-3.3	☐	☒
$C_3H_2FBr_5$	0.1-1.9	☐	☒

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
$C_3H_2F_2Br_4$	0.2-2.1	☐	☒
$C_3H_2F_3Br_3$	0.2-5.6	☐	☒
$C_3H_2F_4Br_2$	0.3-7.5	☐	☒
$C_3H_2F_5Br$	0.9-14	☐	☒
$C_3H_3FBr_4$	0.08-1.9	☐	☒
$C_3H_3F_2Br_3$	0.1-3.1	☐	☒
$C_3H_3F_3Br_2$	0.1-2.5	☐	☒
$C_3H_3F_4Br$	0.3-4.4	☐	☒
$C_3H_4FBr_3$	0.03-0.3	☐	☒
$C_3H_4F_2Br_2$	0.1-1.0	☐	☒
$C_3H_4F_3Br$	0.07-0.8	☐	☒
$C_3H_5FBr_2$	0.04-0.4	☐	☒
$C_3H_5F_2Br$	0.07-0.8	☐	☒
C_3H_6FBr	0.02-0.7	☐	☒

H. Class I Group VIII

Class I Controlled Substances	Ozone Depletion Potential	Apply	N/A
CH_2BrCL Chlorobromomethane	0.12	☐	☒

I. Class II Controlled Substances

Class II Controlled Substances	Ozone Depletion Potential	Apply	N/A
Dichlorofluoromethane (HCFC-21)	0.04	☐	☒
Monochlorodifluoromethane (HCFC-22)	0.055	☐	☒
Monochlorofluoromethane (HCFC-31)	0.02	☐	☒
Tetrachlorofluoroethane (HCFC-121)	0.01-0.04	☐	☒
Trichlorodifluoroethane (HCFC-122)	0.02-0.08	☐	☒
Dichlorotrifluoroethane (HCFC-123)	0.02	☐	☒
Monochlorotetrafluoroethane (HCFC-124)	0.022	☐	☒
Trichlorofluoroethane (HCFC-131)	0.007-0.05	☐	☒
Dichlorodifluoroethane (HCFC-132)	0.008-0.05	☐	☒
Monochlorotrifluoroethane (HCFC-133)	0.02-0.06	☐	☒
Dichlorofluoroethane (HCFC-141b)	0.11	☐	☒
Monochlorodifluoroethane (HCFC-142b)	0.065	☐	☒
Chlorofluoroethane (HCFC-151)	0.003-0.005	☐	☒
Hexachlorofluoropropane (HCFC-221)	0.015-0.07	☐	☒

Class II Controlled Substances	Ozone Depletion Potential	Apply	N/A
Pentachlorodifluoropropane (HCFC-222)	0.01-0.09	☐	☒
Tetrachlorotrifluoropropane (HCFC-223)	0.01-0.08	☐	☒
Trichlorotetrafluoropropane (HCFC-224)	0.01-0.09	☐	☒
Dichloropentafluoropropane (HCFC-225ca)	0.025	☐	☒
Dichloropentafluoropropane (HCFC-225cb)	0.033	☐	☒
Monochlorohexafluoropropane (HCFC-226)	0.02-0.10	☐	☒
Pentachlorofluoropropane (HCFC-231)	0.05-0.09	☐	☒
Tetrachlorodifluoropropane (HCFC-232)	0.008-0.10	☐	☒
Trichlorotrifluoropropane (HCFC-233)	0.007-0.23	☐	☒
Dichlorotetrafluoropropane (HCFC-234)	0.01-0.28	☐	☒
Monochloropentafluoropropane (HCFC-235)	0.03-0.52	☐	☒
Tetrachlorofluoropropane (HCFC-241)	0.004-0.09	☐	☒
Trichlorodifluoropropane (HCFC-242)	0.005-0.13	☐	☒
Dichlorotrifluoropropane (HCFC-243)	0.007-0.12	☐	☒
Monochlorotetrafluoropropane (HCFC-244)	0.009-0.14	☐	☒
Trichlorofluoropropane (HCFC-251)	0.001-0.01	☐	☒
Dichlorodifluoropropane (HCFC-252)	0.005-0.04	☐	☒
Monochlorotrifluoropropane (HCFC-253)	0.003-0.03	☐	☒
Dichlorofluoropropane (HCFC-261)	0.002-0.02	☐	☒
Monochlorodifluoropropane (HCFC-262)	0.002-0.02	☐	☒
Monochlorofluoropropane (HCFC-271)	0.001-0.03	☐	☒

Part V: Title V Source Determination

Check the box(es) next to the standard or emission level which, pursuant to RCSA section 22a-174-33(a)(10), qualifies the facility as a Title V source.

1. Standards

The facility includes one or more emissions units which are subject to (check all that apply):

☐ 40 CFR Part 51	☐ 40 CFR Part 52	☐ 40 CFR Part 59
☒ 40 CFR Part 60	☒ 40 CFR Part 61	☐ 40 CFR Part 62
☒ 40 CFR Part 63	☐ 40 CFR Part 64	☐ 40 CFR Part 68
☒ 40 CFR Parts 70	☐ 40 CFR Parts 72 -78, inclusive	☒ 40 CFR Part 82

☐ Clean Air Act Amendments of 1990 Section 129(e)

Part V: Title V Source Determination (continued)

2. Exemption/Deferral

Are there any exemptions or deferrals that *totally* eliminate this facility as a Title V source?

☒ No ☐ Yes If Yes, which ones?

If the facility meets one of the standards criteria and there are no exemptions or deferrals the facility is a Title V source. Go to Part VII: Supporting Documents.

3. Emissions Level Criteria

If the facility includes one or more emissions units which emit or have the potential to emit, including fugitive emissions to the extent quantifiable, in the aggregate, check the appropriate boxes:

☐ 10 TPY or more of any hazardous air pollutant

☐ 25 TPY or more of any combination of hazardous air pollutants

☐ Such quantity of hazardous air pollutants established by the Administrator pursuant to 40 CFR Part 63

If the facility includes one or more emissions units which emit or have the potential to emit, including fugitive emissions from those categories of sources listed in (2)(i) through (xxvii) in the definition of "major source" in 40 CFR Section 70.2, check the appropriate box(es):

☐ 100 TPY or more of any regulated air pollutant that is not a GHG

☐ 50 TPY or more of VOCs or NOx in a serious ozone non-attainment area

☐ 25 TPY or more of VOCs or NOx in a severe ozone non-attainment area

☐ 100,000 TPY or more of GHG (CO_2e basis) and 100 TPY or more of GHG (mass basis)

4. If any emissions level box is checked in item 3, indicate the method used by checking the appropriate box:

☐ The applicant stipulates to the potential emissions levels
(Each type of pollutant must still be listed with potential emissions. Submit as Attachment E.)

☐ Emission Calculations, submit as Attachment M.

Note: tons per year (TPY); nitrogen oxides (NOx); volatile organic compounds (VOCs); greenhouse gases (GHG)

Part VI: Insignificant Emissions Units Checklist

Check the box(es) next to all the emissions units at the facility which qualify as insignificant emissions units pursuant to RCSA sections 22a-174-33(g)(3)(A) and (B). An applicant may not need to provide emissions information on these items other than checking the appropriate box(es) indicating that these activities or items are present at the facility.

However, if the commissioner determines the emissions from any activity or items are needed to determine the applicability of the Title V regulation to this facility or to impose any applicable requirement, then the applicant shall supply the emissions data for all of the emissions units or activities listed in items 1 and 2 of this Part as Attachment M. If the emissions information is necessary only to determine whether this facility is a Title V source, the applicant shall include the emissions data for only those activities listed in Part VI.2 of this application as Attachment M.

1. Laboratory Hoods

   ☒ A laboratory hood used **solely** for the purpose of experimental study or teaching of any science or testing or analysis of drugs, chemicals, chemical compounds, or other substances, **provided that** the containers used for reactions, transfers, and other handling of substances under such laboratory hood are designed to be easily and safely manually manipulated by one person.

2. Other Insignificant Emissions Units

   This facility includes one or more of the following items or activities which are not the principle function of such Title V source:

   ☒ Office equipment, including but not limited to copiers, facsimile and communication equipment, and computer equipment

   ☒ Grills, ovens, stoves, refrigerators, vending machines, and other restaurant-style food preparation or storage equipment

   ☒ Lavatory vents, hand dryers, and noncommercial clothes dryers, not including dry cleaning machinery

   ☒ Garbage compactors and waste barrels

   ☒ Aerosol spray cans

   ☒ Heating, air conditioning, and ventilation systems which do not remove air contaminants generated by or released from process or fuel burning equipment and which are separate from such equipment

   ☒ Routine housekeeping activities such as painting buildings, roofing, and paving parking lots

   ☒ All clerical and janitorial activities

   ☒ Maintenance activities such as vehicle repair, brazing, soldering and welding equipment, carpentry shops, electrical charging stations, grinding and polishing operations maintenance shop vents, miscellaneous non-production surface cleaning, preparation and painting operations

   ☒ Space heaters which can reasonably be carried by one person by hand

Part VII: Supporting Documents

Please check the attachments submitted as verification that *all applicable* attachments have been submitted with this application form. When submitting any supporting documents that are not identified by a DEEP form number, please label the documents as indicated below (e.g., Attachment A, B, C, etc.). Be sure to include on all supporting documents the applicant's name as indicated on the application form.
(Note: Forms are noted in **italics** followed by the appropriate form number. All other attachments are free form.)

☒	Attachment AA:	Copy of the published notice of permit application, as described in the instructions, and a completed Certification of Notice Form (DEEP-APP-005A), **REQUIRED**
☒	Attachment A:	*Executive Summary* (DEEP-TV-APP-105), **REQUIRED**
☒	Attachment B:	A USGS Quadrangle Map indicating the exact location of the facility or site, **REQUIRED**
☒	Attachment C:	*Operating Scenario Information* (DEEP-TV-APP-101), **REQUIRED**
☒	Attachment D:	*Emissions Unit Information Within Operating Scenarios* (DEEP-TV-APP-102), **REQUIRED**
☒	Attachment D2:	*Generally Applicable Requirements* (DEEP-TV-APP-102B), **IF APPLICABLE**
☒	Attachment E:	*Total Regulated Air Pollutants Emitted Within Operating Scenarios* (DEEP-TV-APP-103), **REQUIRED**
☒	Attachment F:	*Applicant Compliance Information* (DEEP-APP-002), **REQUIRED**
☒	Attachment G:	*Title V Compliance Plan* (DEEP-TV-APP-104), **REQUIRED**
☒	Attachment H:	Within each alternative operating scenario, a description of air pollution control equipment in use at the facility and a description of monitoring equipment in use at the facility used to quantify emissions or to determine compliance. **IF APPLICABLE** (This attachment is for the equipment, which is not associated with an emissions unit therefore, not captured on other forms.)
☐	Attachment I:	For identification and description purposes, supply a copy of the order, permit or certification granting an alternative means of compliance for nitrogen oxides (NOx) or volatile organic compounds (VOCs), **IF APPLICABLE**
☐	Attachment J:	For renewals only, a marked up copy of your current Title V permit noting modifications or other changes. Redline any proposed deleted language and use uppercase font for proposed new language., **IF APPLICABLE**
☐	Attachment K:	*Written Authorization Form RCSA section 22a-174-2a(a)(2)(B)* (DEEP-TV-SIG-REG-002), **IF APPLICABLE**
☐	Attachment L:	Provide a Compliance Assurance Monitoring (CAM) plan for emission units with control devices that have pre-control potential emissions at or above major source thresholds not otherwise exempt such as those subject to a post November 15, 1990 NSPS or NESHAP, sources subject to 40 CFR 82 stratospheric ozone requirements, Acid Rain sources 40 CFR 75, Emission Trading sources and those subject to emission caps associated with a Title V permit, **IF APPLICABLE**
☒	Attachment M:	All calculations, clearly labeled, **IF APPLICABLE**
☐	Attachment N:	Acid Rain Permit Application - A completed *EPA Phase II Acid Rain Permit Application Form* (EPA Form 7610-16) signed by the designated representative or alternate designated representative, **IF APPLICABLE**
☐	Attachment O:	Other Supporting Documents, **IF APPLICABLE**

Part VIII: Certification

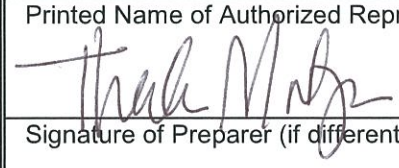
The applicant and the individual(s) responsible for actually preparing the application *must* sign this part. An application will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that a false statement made in the submitted information may be punishable as a criminal offense, under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

I certify that this application is on complete and accurate forms as prescribed by the commissioner without alteration of the text.

I certify that I have complied with all notice requirements as listed in section 22a-6g of the Connecticut General Statutes."

Signature of Authorized Representative	Date
Printed Name of Authorized Representative	Title (if applicable)
	1/11/19
Signature of Preparer (if different than above)	Date
Therlin Montgomery, Wright-Pierce	**Project Manager**
Printed Name of Preparer	Title (if applicable)

☐ Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet.

Note: Please submit this completed Application Form, and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Note: A *Permit Application Transmittal Form* (DEEP-APP-001) is **not** required with this application form.

Please remember to publish notice of the permit application **prior** to submitting your completed application to DEEP. Send a copy of the published notice to the chief elected official of the municipality in which the regulated activity is proposed, and provide DEEP with a copy of the published notice, as described in the instructions, attached to a completed *Certification of Notice Form* (DEEP-APP-005A) as Attachment AA to this application.

A *copy* of the above materials must also be submitted together as a package to:

EPA REGION I
5 POST OFFICE SQUARE – SUITE 100
MAIL CODE OEP05-02
BOSTON, MASSACHUSETTS 02109-3912

ATTACHMENT AA

Certification of Notice Form
(DEEP-APP-005A)

Connecticut Department of
Energy & Environmental Protection

Certification of Notice Form - Notice of Application

DEEP USE ONLY
Division
Application No.

I , **Ronald Merancy** , certify that
(Name of Applicant)

the attached notice represents a true copy of the notice that appeared in **The Waterbury Republic-American**
(Name of Newspaper)

on **11/21/2018**
(Date)

I also certify that I have provided a copy of said notice to the chief elected municipal official listed below as required by section 22a-6g CGS.

N. Warren "Pete" Hess III	**Mayor of Naugatuck, CT**	
Name of Official	*Title of Official*	
229 Church Street, 4th floor		
Address		
Naugatuck	**CT**	**06770**
City/Town	*State*	*Zip Code*
Signature of Applicant	*Date*	
Borough of Naugatuck	**N/A**	
Name of Applicant (print or type)	*Title (if applicable)*	

Commercial for sale, lease, rent

Announcements

Absolutely free
Lost & found
Special notices

Absolutely free

Lost & found

Legals/ Public Notices

LEGAL NOTICE
ISSUANCE OF CERTIFICATE OF ZONING COMPLIANCE

Legals/ Public Notices

LEGAL NOTICE

In accordance with CT Statute 47-4-42C, the personal property from the following locations will be auctioned at 7:00 a.m. on Thursday, November 29, 2018 at Dina Moving & Storage Inc., 100 Smoron Court, Southington Ct.

RA November 21, 2018

Invitation to Bid
Request for Proposal
Banking Services

The Town of Southbury, Connecticut seeks an appropriate and qualified company to provide Banking Services as described in the bid documents.

Interested proposers should submit their information before December 5, 2018, 1:30 p.m. to:

Southbury Town Hall
Office of the First Selectman

Legals/ Public Notices

NOTICE TO CREDITORS
ESTATE OF Edwin A. Classey
AKA E. A. Classey

The Hon. Matthew P. Vaccarelli, Judge of the Court of Probate, District of Waterbury Probate Court, by decree dated November 5, 2018, ordered that all claims must be presented to the fiduciary at the address below. Failure to promptly present any such claim may result in the loss of rights to recover on such claim.

Thomas P. Brunnock, Judge

The fiduciary is:
Shirley A. Classey
c/o Atty. Joseph P. Iacovetta
Iacovetta, Burnham & Wimer, LLC
2620 Main Street
Glastonbury, CT 06033

RA November 21, 2018

REPOSSESSED VEHICLE AUCTION

ATTACHMENT A

Executive Summary
(DEEP-TV-APP-105)

Attachment A: Executive Summary (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Provide an executive summary of the application contents. Include in the summary a description of the facility, a Table of Contents (TOC), and a list of emissions units. See additional information and an example of a TOC in *Instructions for Completing the Application for a New Title V Permit or the Renewal of an Existing Title V Permit* (DEEP-TV-INST-100).

Section 1: Facility Description
Provide a brief description of the primary function of the facility, and the processes and operations contained within. The description and function information represents the facility's standard operating scenario, (SOS). For renewals, provide a list of changes in circumstances or information on which the previous permit was based.

The Borough of Naugatuck (in Connecticut Department of Energy and Environmental Protection [CTDEEP] Town Number 109) owns a 10.3 million gallon per day (mgd) publicly-owned biological treatment works (POTW, CTDEEP Premises Number 11) located at 500 Cherry Street, Naugatuck, Connecticut. The facility processes municipal sanitary and industrial nonhazardous waste water, and is permitted to operate an existing sewage sludge incinerator (SSI). The facility commenced construction on August 15, 1972 and has operated since 1973. The Naugatuck POTW facility previously applied for and was granted a Title V permit, Permit Number 109-0059-TV in November 2000, subsequently revoked at the Borough's request by CTDEEP in May 2010.

The Borough of Naugatuck owns a Zimpro fluidized bed sewage sludge incinerator (SSI) located at 500 Cherry Street in Naugatuck, Connecticut. The incinerator, located at the Naugatuck Wastewater Treatment Plant, is operated by Naugatuck Environmental Technologies, LLC (NET) under contract with the Borough of Naugatuck. The SSI is permitted by the Connecticut Department of Energy and Environmental Protection (CTDEEP) in the New Source Review (NSR) Permit to Operate a Stationary Source Permit Number 0081, Town 109, Premises Number 11, Modification Issue Date April 23, 2009 (NSR Permit) and is also subject to the Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or before October 14, 2010 (40 CFR Part 62, Subpart LLL).

Subpart LLL requires the development and submission of a Title V permit for all Sewage Sludge Incinerators (§62.16035). This Title V permit application has been prepared to address this requirement.

In June 2012 CTDEEP notified the Borough of Naugatuck that under 40 Code of Federal Regulations (CFR) §60.5245, a portion of "Subpart MMMM-Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units" a Title V permit application must be submitted by March 21, 2014. In response to this requirement, the Borough of Naugatuck submitted a new Title V permit application package for the existing SSI configuration. The SSI has since been upgraded to meet the new emission regulations under 40 CFR 60 as well as 40 CFR Part 62. As the earlier Title V permit application has not been issued as a permit, the Borough requests that this earlier application be rejected.

In addition to the treatment of sanitary and non hazardous industrial wastewaters, the POTW was originally permitted to operate two Nichols multiple hearth SSIs which have since been substantially demolished. In April 2002, CTDEP issued New Source Review (NSR) Permit No. 109-0081 for a Zimpro fluidized bed SSI with a rate of 3.125 dry tons of sewage sludge per hour (DT/hr) to replace the two Nichlos incinerators (Permit Nos. 109-001 and 109-002). The facility modified the 2002 permit to increase the rate of 3.125 dry tons of sewage sludge per hour (DT/hr) to 3.5 DT/hr. This permit was issued April 23, 2009. In March of 2010, the facility applied for a modification to the 2009 permit to lower their nitrogen oxides emission limits to 44 tons per year (TPY) from 55 TPY. The CTDEP granted the modification and the current NSR Permit No. 109-0081 for the Zimpro SSI operating at 3.5 DT/hr was issued by CTDEP on May 7, 2010. A renewal application of the NSR permit was submitted to the DEEP on March 23, 2018.

The Naugatuck POTW facility includes numerous emission units. The majority of the equipment located at

the facility are trivial or insignificant. There are fourteen 4 groups of sources that are significant. Aside from the Zimpro fluidized bed SSI, the POTW also operates three (3) residential heating boilers and one (1) emergency generator. None of these combustion sources is of sufficient size to require a permit and the emergency generator operates under RCSA 22a-174-3b "permit by rule." Additionally, the POTW houses settling tanks, aeration tanks, thickening tanks, holding tanks, sludge belt filter presses, external combustion sources and a number of storage tanks.

Primary Function and Processes

Wastewater Treatment

The POTW is a regional facility originally serving Naugatuck, Middlebury and Oxford, Connecticut. The POTW previously served the former adjacent Uniroyal Chemical Company, Inc. facility (Uniroyal); however operation at Uniroyal has ceased and therefore the Naugatuck POTW no longer accepts pretreated effluent from Uniroyal. The POTW was originally designed, approved and constructed as a combined municipal/industrial treatment system. As its Standard Operating Scenario (SOS), influent from the area municipal sewerage system is received into the POTW's wet well and pumped into the municipal primaries. The influent is passed on to a single stage biological nitrification system after which the POTW' s residuals are collected and stored for incineration while the effluent goes on to disinfection and dechlorination with subsequent discharge to the Naugatuck River. Additionally, the POTW receives sanitary septage and nonhazardous commercial and industrial wastewaters as may be covered under various CTDEEP permits and authorizations as appropriate to the facility. The plant also processes its own internal recycle streams which include the incinerator wet ash lagoons overflow and belt press filtrate.

Dewatering

As a regional processing center, the POTW receives trucked in sewage sludge from municipal wastewater treatment processes from outside of the POTW's collection area. The Naugatuck POTW receives sludges in liquid slurry and cake form. In preparation for incineration, the POTW's internal sludge generation is thickened to approximately four percent solids prior to being dewatered in the belt filter presses. Pre-thickened municipal sludges generated by other sanitary wastewater treatment systems are received directly to storage tanks and commingled with the POTW' s own internal sludge. The water removed from the liquid sludge slurry along with the continuous wash water used to maintain belt porosity is returned to the POTW' s wastewater treatment system along with the other wastewater influents to the plant.

Incineration

One Zimpro fluidized bed SSI currently operates at the POTW facility. The incinerator vessel has three sections the windbox, the sand bed and the overbed. Air is injected into the windbox located under the sand bed and passes through dome fluidizing the sand bed continuing on to the overbed area above the sand bed and out of the vessel. Sludge from the dewatering system is fed to the bottom of the sand bed. Processing of sludge within the sand bed consists of evaporation of water and thermal decomposition of organic material. The remaining combustible gases are burned in the freeboard area above the sand bed. Oil lances are located within the sand bed in order to deliver auxiliary fuel to maintain the desired combustion temperature, if necessary. All ash generated in the combustion chamber leaves the top of the incinerator. The incinerator utilizes fuel injection to raise the temperature of the furnace to maintain furnace temperature if needed. Generally the FBI runes without supplemental fuel. After the flue gas passes through the waste recovery unit, particulate is removed by a combination of Quench/wet scrubber combination to cool the gas and capture the particulate and associated metals and removes the acid gases. The GORE scrubber removes the mercury to below the required mercury discharge limits.

The incinerator has a startup burner which is only used when the incinerator is being started up after a shutdown period where the incinerator is in a cold state. This is an unfrequent occurance and is only done for inspections/repare of the vessel.

A System Control and Data Acquisition System (SCADA) is used to control the incineration system and to historically log operations. Air, sludge feed rate, and auxiliary fuel feed rate are automatically controlled to maintain the process in balance.

Background of the Connecticut Title V Program

The CT DEEP operating permit rule, Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA), applies to major stationary sources of air pollutants and facilities with certain federally enforceable operating conditions. These federal conditions include stationary sources subject to 40 CFR Parts 60 (New Source Performance Standards), 61 (National Emission Standards for Hazardous Air Pollutants), 68 (Accidental Release Prevention Provisions), and 72-78 (Acid Rain Provisions), or Section 129(e) of the 1990 CAAA (Municipal Waste Combustor Provisions), unless specifically exempted or deferred by the U.S. EPA Administrator.

Title V Applicability

The POTW operates an existing SSI. Under Subpart MMMM-Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units (40CFR 60.5000) and Subpart LLL Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010 (40 CFR 62.16035), each facility with SSI unit(s) must develop an acceptable plan with emission limits to manage the SSI(s). In accordance with 40 CFR 60.5045, the State of Connecticut has opted to allow EPA to prepare a Federal Implementation Plan (FIP) for SSIs operating in the State. Although the FIP has not yet been issued, 40 CFR 60.5246 and 40 CFR 62.16040 and requires that wastewater treatment facilities operating an SSI must submit a complete Title V permit application no later than March 21, 2014.

This application is being submitted in compliance with the above requirement. The Borough of Naugatuck has submitted an NSR permit application to the CT DEEP. Upon approval of the future NSR permit, The Borough of Naugatuck, will be submitting a revised Title V application to reflect the changes to the facility.

Section 2: Table of Contents

The TOC will **list** as part of the contents: the *New Title V Permit or Renewal of an Existing Title V Permit Application* (DEEP-TV-APP-100) and all of the supplemental application forms, attachments, descriptions, calculations, orders, operations, maps, or other supporting documentation which are attached as part of the application.

Section 3: Emissions Unit Summary

NOTE: Please complete Attachment D prior to completing this section.

Provide a tabulated summary of the following information for each emissions unit (EU) or grouped emissions units (GEU) as included in Attachment D of this application form: *If additional space is needed, place the cursor at the end of this table, in the last cell, then select the tab button to create additional rows.*

1. EU or GEU number
2. Facility defined identification number, if applicable
3. Emission unit description, include Make, Model, Year of Construction, Maximum Throughput/Capacity
4. Control unit description, if applicable
5. Applicable Permit (P), Registration (R), Order (O), or Regulation (RCSA, CFR, etc.) number(s)
6. Facility defined location (e.g., Building Number) with the actual location indicated on Attachment B, *USGS Quadrangle Map*, if all emissions units are not located within or near one building.

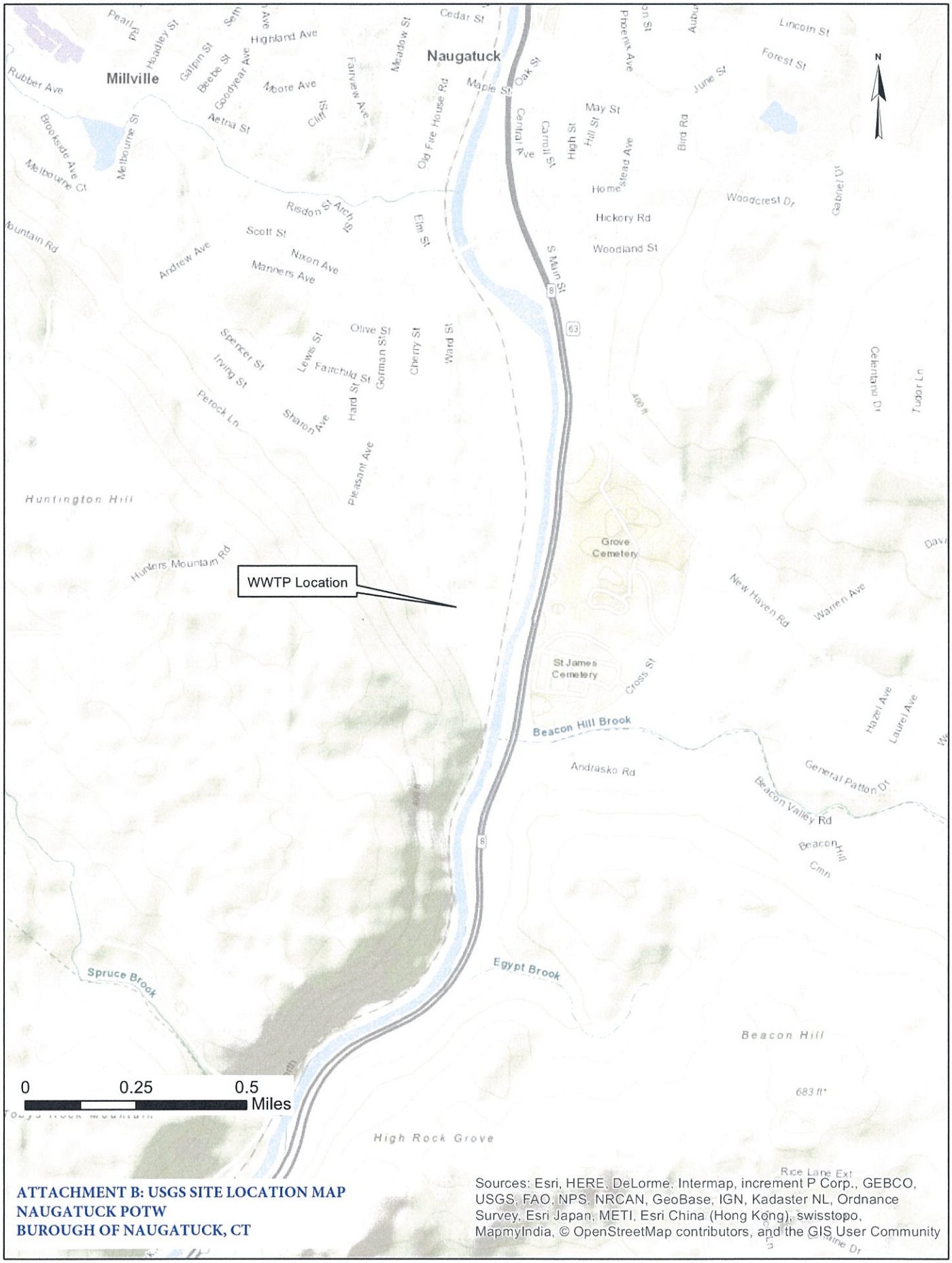
TABLE A: EMISSIONS UNIT SUMMARY

Emissions Unit/ Grouped Emissions Unit/Facility ID	Emissions Unit Description (Make, Model, Year of Construction, Maximum Throughput or Capacity)	Control Unit Description	Permit, Order, Registration, or Regulation Number(s)	Facility Location
EU-005 GEU-5	Peerless O-505-FDA-WU Boiler, 1972, 0.71 MMBTU/hr	N/A	State Boiler Operations Cert. 025802	Administration Building Basement
EU-006 GEU-5	Peerless JO-45-PF-WPCF Boiler, 1971,0.30 MMBTU/hr	N/A	State Boiler Operations Cert. 027186	Service Building Basement
EU-007	Generac 600 kW Emergency Generator, Model #3417900100, 2001	N/A	None	Generator Room
EU-009 GEU-2	Underground Storage Tank, 20,000 gallons, No. 2 Fuel Oil, 1990 ,	N/A	None	Outside West of Boiler Room
EU-011 GEU-2	Above Ground No. 2 Fuel Oil Tank, 275 gallons	N/A	None	Service Building
EU- 012 GEU-2	Above Ground Storage Tank, 580 gallons, Waste Lube Oil, unknown year of construction	N/A	None	Oil building

TABLE A: EMISSIONS UNIT SUMMARY				
Emissions Unit/ Grouped Emissions Unit/Facility ID	**Emissions Unit Description** (Make, Model, Year of Construction, Maximum Throughput or Capacity)	**Control Unit Description**	**Permit, Order, Registration, or Regulation Number(s)**	**Facility Location**
EU- 013 GEU-002	ZimproFluidize Bed Sewage Sludge Incinerator with EnviroCare Multi Venturi Scrubber and GORE Hg Adsorption System	EnviroCare Multi Venturi Scrubber and GORE Hg Adsorption System	109-0081	Outside East of New Incinerator Building
EU-015 GEU-5	Preheat Burner	N/A	None	Outside East of New Incinerator Building
EU-021 GEU-2	Hot Oil Emergency Tank, 4000 gallons	N/A	None	Outside South of Abel Room
EU-025 GEU-2	Hot Oil Sump, 595 gallons	N/A	None	Abel Room
EU-027 GEU-5	Buderus Boiler No. 1, 1.09 MMBTU/hr	N/A	State Boiler Operations Cert. 115616	Boiler Room
EU-028 GEU-2	Above Ground No. 2 Fuel Oil Tank, 275 gallons	N/A	None	Generator Room
EU-029 GEU-2	Above Ground No. 2 Fuel Oil Tank, 275 gallons	N/A	None	Admin. Building
EU-059 GEU-2	Convault Above Ground Storage Tank, 2000 Gallons, ULSD, 2007	N/A	None	Outside West of generator room

ATTACHMENT B

USGS Quadrangle Map



ATTACHMENT B: USGS SITE LOCATION MAP
NAUGATUCK POTW
BUROUGH OF NAUGATUCK, CT

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

ATTACHMENT C

Operating Scenario Information
(DEEP-TV-APP-101)

Attachment C: Operating Scenario Information (REQUIRED)

If the applicant chooses to apply *only* for Standard Operating Scenarios (SOS) and not apply for any Alternative Operating Scenario (AOS) then *only* Part I is required. If any AOS are listed, *both* Parts I and II are required.

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

SIC Code(s): 4952

Part I: SOS (REQUIRED)

Emissions Unit or Grouped Emissions Unit	Description of the Processes Utilized for the SOS
EU-005	Peerless O-705-FDA-WU Boiler, 0.71 MMBTU/hr
EU-006	Peerless JO-45-PF-WPCF Boiler, 0.30 MMBTU/hr
EU-007	Generac 600 kW Emergency Generator
EU-009	Underground Storage Tank, 20,000 gallons, No. 2 Fuel Oil
EU-010	N/A
EU-011	Above Ground Storage Tank, 275 gallons, No.2 Fuel Oil (Service Building)
EU-012	Above Ground Storage Tank, 580 gallons, Waste Lube Oil
EU-013	ZimproFluidized Bed Sewage Sudge Incinerator with EnviroCare Multi Venturi Scrubber and GORE Hg Adsorption System
EU-014	N/a
EU-015	PreHeat Burner
EU-021	Hot Oil Emergency Tank, 4,000 gallons
EU-025	Hot oil sump, 595 gallons
EU-026	N/A
EU-027	Buderus Boiler No. 1, at 1.09 MMBTU/hr
EU-028	Above Ground No. 2 Fuel Oil Tank No.1, 275 gallons (Generator Room)
EU-029	Above Ground No. 2 Fuel Oil Tank No.2, 275 gallons (Admin. Building)
EU-059	Convault above Ground Storage Tank, 2,000 gallons, ULSD
GEU-002	EU-009, EU-011, EU-012, EU-021, EU-025, EU-28, EU-29, EU-059
GEU-005	EU-005, EU-006, EU-014, EU-015, EU-026, EU-027
EU-	

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: AOS (IF APPLICABLE)

AOS Number: **AOS-00**

Emissions Unit or Grouped Emissions Unit	Description of the Processes Utilized for the AOS	Circumstances Under which this AOS will be Used
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		
EU-		

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

ATTACHMENT D

Emissions Unit Information Within Operating Scenarios (DEEP-TV-APP-102)

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**007**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Generac 600 kW Emergency Generator**
   Make: **Generac**
   Model: **#3417900100**
   Serial No.: **2073728**
3. Source Classification Code: **2-02-001-02**
4. Construction Date (MM/DD/YY): **2001** ☐ check box, if estimated
5. Throughput: **23,100 gal/yr**
6. Hours of Operation (hr/yr): **500**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **N/A**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: Emissions Unit – Applicable Requirements (REQUIRED)

Emissions Unit Number(s): EU-**007** or Grouped Emissions Unit Number: GEU-

Operating Scenario (check one): ☒ SOS or ☐ AOS-

You may list multiple units together, which are not combined with a grouped emissions unit for those that have identical applicable requirements, in order to avoid duplicating the regulations.

Applicable Requirements Including Applicable MACT Source Category	Permit Shield Requested? (Y/N)	Applicable Test Method	Other Information Required by Applicable Requirements
22a-174-18	Y	**Recordkeeping**	
22a-174-3 (c)	Y	**Recordkeeping**	
40 CFR 63 Subpart ZZZZ	Y	**Recordkeeping**	

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**013**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **ZimproFluidized Bed Sewage Sudge Incinerator with EnviroCare Multi Venturi Scrubber and GORE Hg Adsorption System**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **F00002**
3. Source Classification Code: **5-01-008-01**
4. Construction Date (MM/DD/YY): **2002** ☐ check box, if estimated
5. Throughput: **3.5 dT/hr**
6. Hours of Operation (hr/yr): **8760**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **Varies with sludge content**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **A**
   Make: **EnviroCare/GORE**
   Model: **MultiVenturi Scrubber/Mercury adsorber**
   Serial No.: **Job No. 1151**
9. Monitoring Equipment Description: **CEMS/COMS**

Make: **O2 Analyzer: Siemens**	**CO Analyzer: ThermoScientific**	**NOx Analyzer: Siemens**
Model: **OXYMAT6E**	**Model: 48i-HL-ANPC13**	**Model: ULTRAMAT23**
Serial No.: **7MB2021-1EA00-0AA1**	**S/N 1405660903**	**S/N 7MB2335-3PG002ER0-5AA1**

10. DEEP Permit, Order or Registration No(s).: **EP/OP 109/11-0081**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: Emissions Unit – Applicable Requirements (REQUIRED)

Emissions Unit Number(s): EU-**013** or Grouped Emissions Unit Number: GEU-

Operating Scenario (check one): ☒ SOS or ☐ AOS-

You may list multiple units together, which are not combined with a grouped emissions unit for those that have identical applicable requirements, in order to avoid duplicating the regulations.

Applicable Requirements Including Applicable MACT Source Category	Permit Shield Requested? (Y/N)	Applicable Test Method	Other Information Required by Applicable Requirements
Permit 109-0081	Y	Stack Test or sludge sampling recordkeeping	Reporting
22a-174-18 Control of Particulate and visible emissions	Y	Particulate	Recordkeeping
40 CFR, Part 60 Subpart A General Provisions	Y	Stack Test	Recordkeeping
40 CFR, Part 60 Subpart O Stds of Performance for Sewage Plants	Y	Stack Test	Recordkeeping
40 CFR, Part 60 Subpart MMMM	Y	Stack Test	Recordkeeping
40 CFR, Part 61 Subpart A General Provisions	Y	Recordkeeping	
40 CFR, Part 61 Subpart C National Emission Standards for Beryllium	Y	Stack Test or sludge sampling	Recordkeeping
40 CFR, Part 61 Subpart E National Emission Standards for Mercury	Y	Stack Test or sludge sampling	Recordkeeping
40 CFR, Part 62 Subpart LLL	Y	Stack Test or sludge sampling	Recordkeeping
40 CFR, Part 503 Tech. Stds for Use & Disposal of SS, Subpart E Incin.	Y	Stack Test or sludge sampling	Recordkeeping

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**009**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Underground Storage Tank**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **1990** ☐ check box, if estimated
5. Throughput: **799,871 gal/yr**
6. Hours of Operation (hr/yr): **8760**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **20,000 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **Permit No. 109-0077**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**011**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Aboveground Storage Tank - No. 2 Fuel Oil (Service Building)**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **1972** ☐ check box, if estimated
5. Throughput: **1612 gal/yr**
6. Hours of Operation (hr/yr): **8760**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **275 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**012**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Aboveground Storage Tank - Waste Lube Oil**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **Unknown** ☐ check box, if estimated
5. Throughput: **1540 gal/yr**
6. Hours of Operation (hr/yr): **N/A**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **580 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**021**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Hot Oil Emergency Tank**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **2002** ☐ check box, if estimated
5. Throughput: **N/A**
6. Hours of Operation (hr/yr): **N/A**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **4000 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional Controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**025**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Hot Oil Sump**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **2002** ☐ check box, if estimated
5. Throughput: **N/A**
6. Hours of Operation (hr/yr): **N/A**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **595 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**028**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Above Ground Storage Tank - No. 2 Fuel Oil (Generator Room)**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **10-2015** ☐ check box, if estimated
5. Throughput: **1,000 gal/yr**
6. Hours of Operation (hr/yr): **8760**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **275 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional Controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**029**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Above Ground Storage Tank - No. 2 Fuel Oil (Admin. Building)**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **1972** ☐ check box, if estimated
5. Throughput: **5,094 gal/yr**
6. Hours of Operation (hr/yr): **8760**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **275 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional Controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**059**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**002**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Convault above Ground Storage Tank - ULSD**
   Make: **N/A**
   Model: **N/A**
   Serial No.: **N/A**
3. Source Classification Code: **4-04-04-13/4-04-004-14**
4. Construction Date (MM/DD/YY): **01-2007** ☐ check box, if estimated
5. Throughput: **N/A**
6. Hours of Operation (hr/yr): **8760**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **2,000 gallons**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional Controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **N/A**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   - **a.** Emissions Unit Number: EU-**005**
   - **b.** Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**005**
   - **c.** Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Boiler (Admin. Building)**
   Make: **Peerless**
   Model: **O-705-FDA-WU**
   Serial No.: 7FDA-1443
3. Source Classification Code: **1-03-005-01**
4. Construction Date (MM/DD/YY): **1972** ☐ check box, if estimated
5. Throughput: **4931 gal/yr No. 2 Fuel Oil**
6. Hours of Operation (hr/yr): **N/A**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **0.71 MMBtu/hr**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional Controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **None**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: 81430

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**006**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**005**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Boiler (Service Building)**
   Make: **Peerless**
   Model: **JO-45PF-WPCF**
   Serial No.: **JO-49818**
3. Source Classification Code: **1-03-005**
4. Construction Date (MM/DD/YY): **1971** ☐ check box, if estimated
5. Throughput: **2183 gal/yr**
6. Hours of Operation (hr/yr): **Not Available**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **0.30 MMBTU/hr**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **81430**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**015**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**005**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **PreHeat Boiler**
   Make: **North American Manufacturing Company**
   Model: **5514-9**
   Serial No.: **Unknown**
3. Source Classification Code: **1-03-005-01**
4. Construction Date (MM/DD/YY): **2002** ☐ check box, if estimated
5. Throughput: **118 gal/hr**
6. Hours of Operation (hr/yr):
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **22,500 scfh (118 gal/hr)**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
      If No, indicate why:
8. Control Equipment Description: **A**
   Make: **Envirocare/Gore**
   Model: **Multiventuri Scrubber/Mercury Adsorber**
   Serial No.: **Job No. 1151**
9. Monitoring Equipment Description: **CEMS**

Make: **O2 Analyzer: Siemens**	**CO Analyzer: ThermoScientific**	**NOx Analyzer:Siemens**
Model: **OXYMAT6E**	**Model: 48i-HL-ANPC13**	**Model: ULTRAMAT23**
Serial No.: **7MB2021-1EA00-0AA1**	**S/N 1405660903**	**S/N 7MB2335-3PG002ER0-5AA1**

10. DEEP Permit, Order or Registration No(s).:

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D: Emissions Unit Information Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Does the emissions unit operate under an Alternative Operating Scenario? ☐ Yes ☒ No

If Yes, list all that apply. Alternative Operating Scenario Number(s) (AOS-):

Complete Part I for each combination of emissions unit and operating scenario. Complete Part II for each combination of emissions unit, group of emissions units, or grouped emissions unit, and operating scenario.

Part I: Emissions Unit Information (REQUIRED)

1. Emissions Unit :
   a. Emissions Unit Number: EU-**027**
   b. Grouped Emissions Unit Number (emissions unit is part of a grouped emissions unit): GEU-**005**
   c. Operating Scenario (check one): ☒ SOS or ☐ AOS-
2. Description of emissions unit: **Boiler (Boiler Room)**
   Make: **Buderus Boiler No. 1, at 1.09 MMBTU/hr**
   Model: **GE5.15/8**
   Serial No.: **2530-456-000023-5086702**
3. Source Classification Code: **1-03-005-01**
4. Construction Date (MM/DD/YY): **2016** ☐ check box, if estimated
5. Throughput: **Typically 8017 gal/yr**
6. Hours of Operation (hr/yr): **not available**
7. Maximum Rated Capacity (MRC)
   a. Provide the manufacture's MRC: **1.009 MMBTU/hr**
   b. Is the MRC in item 7a. the original design MRC? ☒ Yes ☐ No
   If No, indicate why:
8. Control Equipment Description: **No Additional controls**
   Make:
   Model:
   Serial No.:
9. Monitoring Equipment Description: **N/A**
   Make:
   Model:
   Serial No.:
10. DEEP Permit, Order or Registration No(s).: **81430**

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: Emissions Unit – Applicable Requirements (REQUIRED)

Emissions Unit Number(s): EU- or Grouped Emissions Unit Number: GEU-**005**

Operating Scenario (check one): ☒ SOS or ☐ AOS-

You may list multiple units together, which are not combined with a grouped emissions unit for those that have identical applicable requirements, in order to avoid duplicating the regulations.

Applicable Requirements Including Applicable MACT Source Category	Permit Shield Requested? (Y/N)	Applicable Test Method	Other Information Required by Applicable Requirements
22a-174-18(a): Opacity	Y	**Recordkeeping**	
22a-174-18(a)(1): Particulate Matter	Y	**Recordkeeping**	
22a-174-19: Fuel Sulfur Content	Y	**Recordkeeping**	
22a-174-3c Limitations on Potential to emit for external combustion units, emergency engines, automotive refinishing operations, nonmetallic mineral processing equipment and surface coating operations.	Y	**Recordkeeping**	

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

ATTACHMENT D2

Generally Applicable Requirements
(DEEP-TV-APP-102B)

Attachment D2: Generally Applicable Requirements (IF APPLICABLE)

(An example of a generally applicable requirement would be fugitive dust from roads.)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Operating Scenario Number(s) (AOS/AOS-):

Applicable Requirements Including Applicable MACT Source Category	Permit Shield Requested? (Y/N)	Applicable Test Method	Other Information Required by Applicable Requirements
22a-174-3(a): Pemits	Y	N/A	
22a-174-4 Source Monitoring, Record keeping, Reporting and Inspections	Y	N/A	
22a-174-5: Testing	Y	N/A	
22a-174-6: Emergency Episodes	Y	N/A	
22a-174-7: Malfunction of Control Equipment	Y	N/A	
22a-174-8: Compliance Plans	Y	N/A	
22a-174-9: Prohibition of Air Pollution	Y	N/A	
22a-174-10 Public Availability of information	Y	N/A	
22a-174-11: Prohibition of Concealment (pollution) or Circumvention (appl. of regulations)	Y	N/A	
22a-174-12: Violation and Enforcement	Y	N/A	
22a-174-13 Variances	Y	N/A	
22a-174-14 Compliance with regs no defense to nuisance claim	Y	N/A	
22a-174-16: Compliance with Applicatble Regulations (regardless of permit or registration exemption)	Y	N/A	

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Attachment D2: Generally Applicable Requirements (IF APPLICABLE)

(An example of a generally applicable requirement would be fugitive dust from roads.)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Operating Scenario Number(s) (AOS/AOS-): **SOS-1**

Applicable Requirements Including Applicable MACT Source Category	Permit Shield Requested? (Y/N)	Applicable Test Method	Other Information Required by Applicable Requirements
22a-174-23: Odor	Y	N/A	
22a-174-26: Permit Fees	Y	N/A	
22a-174-29(b)(1): Hazardous Air Pollutants (State only requirement)	Y	N/A	
22a-174-33: Title V, State Operating Permits	Y	N/A	
40 CFR Part 60, Subpart O: Sewage	Y	N/A	
40 CFR Part 61, Subpart C: Beryllium	Y	N/A	
40 CFR Part 61, Subpart C: Mercury	Y	N/A	
40 CFR Part 61, Subpart A: General Provisions	Y	N/A	
40 CFR Part 61, Subpart E: National Emissions Standards for Mercury	Y	N/A	
40 CFR Part 503, Technical Standards for the Use of Desposal of Sewage Sludge, Subpart E, Incineration	Y	N/A	
40 CRF Part 60 Subpart MMMM	Y	N/A	
40 CFR Part 62 Subpart LLL	Y	N/A	
22a-174-2a Proceedural Requirments	Y	N/A	

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

ATTACHMENT E

Total Regulated Air Pollutants Emitted within Operating Scenarios (DEEP-TV-APP-103)

Attachment E: Total Regulated Air Pollutants Emitted Within Operating Scenarios (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Operating Scenario Number(s) (SOS/AOS-): **SOS**

Part I: Total Regulated Air Pollutants Emitted (REQUIRED)

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Regulated Air Pollutant	Potential to Emit NA, ✓, or P	Potential Emissions Amounts (TPY)		Stipulated or Calculation	Actual Emissions Amounts (TPY)	Operational Limits or Work Practice Standards
		Before Control Device	After Control Device			
TSP	☒					
PM-10	☒		7.5	Calculation	7	
PM-2.5	☐		7.6	Calculation	7	
SOx	☒		59.6	Calculation	52.5	
NOx	☒		49.6	Calculation	42.3	
VOC	☒		11.3	Calculation	8.6	
CO	☒		22.3	Calculation	20.3	
Pb	☒		0.3	Calculation	0.3	
GHG	☐					

Part II: Total Hazardous Air Pollutants Emitted (IF APPLICABLE)

Hazardous Air Pollutants	Potential to Emit NA, ✓, or P	Potential Emissions Amounts (TPY)		Stipulated or Calculation	Actual Emissions Amounts (TPY)	Operational Limits or Work Practice Standards
		Before Control Device	After Control Device			
Antimony	☒		0	Calculation	0	
Arsenic	☒		0.0001666	Calculation	0.000151	
Beryllium	☒		0.0040251	Calculation	0.00402	
Cadmium	☒		4.064E-05	Calculation	3.37E-05	
Cobalt	☒		0	Calculation	0	
Chromium	☒		0.0009298	Calculation	0.000873	
	☐					
Mercury	☒		0.0009303	Calculation	0.000873	

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: Total Hazardous Air Pollutants Emitted (IF APPLICABLE)

Hazardous Air Pollutants	Potential to Emit NA, ✓, or P	Potential Emissions Amounts (TPY)		Stipulated or Calculation	Actual Emissions Amounts (TPY)	Operational Limits or Work Practice Standards
		Before Control Device	After Control Device			
Nickel	☒		0.0001633	Calculation	0.000149	
Selenium	☒		0.006132	Calculation	0.005786	
Acetaldehyde	☒		0.0012225	Calculation	5.48E-05	
Acrolein	☒		0.0001474	Calculation	6.60512E-06	
Benzene	☒		0.7045969	Calculation	0.428485508	
Bis(2ethylhexyl) phthalate	☒		1.25706	Calculation	1.186212	
1,3-Butadiene	☒		6.23215E-05	Calculation	6.23E-05	
Carbon Tetrachloride	☒		3.29E-04	Calculation	2.792E-06	

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: Total Hazardous Air Pollutants Emitted (IF APPLICABLE)

Hazardous Air Pollutants	Potential to Emit NA, ✓, or P	Potential Emissions Amounts (TPY)		Stipulated or Calculation	Actual Emissions Amounts (TPY)	Operational Limits or Work Practice Standards
		Before Control Device	After Control Device			
Chlorobenzene	☒		0.0001533	Calculation	0.00014466	
Chloroform	☒		0.178239134	Calculation	0.07209006	
1,4-Dichloroethane	☒		N/A	Calculation	N/A	
Ethylbenzene	☒		0.002968408	Calculation	0.001806338	
Formaldehyde	☒		0.130213669	Calculation	0.077723923	
Hexane	☒		0.000359395	Calculation	0.00011228	
Hydrogen Chloride	☒		N/A	Calculation	N/A	
Methylen Chloride	☒		0.132313809	Calculation	0.078444764	

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part II: Total Hazardous Air Pollutants Emitted (IF APPLICABLE)

Hazardous Air Pollutants	Potential to Emit NA, ✓, or P	Potential Emissions Amounts (TPY)		Stipulated or Calculation	Actual Emissions Amounts (TPY)	Operational Limits or Work Practice Standards
		Before Control Device	After Control Device			
Naphthalene	☒		2.748675163	Calculation	2.912706055	
PAH	☒		0.000267775	Calculation	1.19963E-05	
POM	☒		7.23884E-05	Calculation	3.45923E-05	
Perchloroethylene	☒		3.29E-03	Calculation	3.29E-03	
Toluene	☒		1.722871548	Calculation	1.043723183	
1,1,1-Trichloroethane	☒		0.177379501	Calculation	0.110248484	
Trichloroetha	☒		0.24903819	Calculation	0.151022264	
Xylene	☒		0.001440427	Calculation	8.37554E-05	

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

ATTACHMENT F

Applicant Compliance Information
(DEEP-APP-002)

Connecticut Department of
Energy & Environmental Protection

Applicant Compliance Information

DEEP ONLY
App. No.
Co./Ind. No.

Applicant Name: Borough of Naugatuck

Mailing Address: **226 Church St, 3rd Floor**

City/Town: **Naugatuck** State: **CT** Zip Code: **06770**

Business Phone: **203-720-7005** ext.:

Contact Person: Phone: ext.

*E-mail:

If you answer *yes* to any of the questions below, you must complete the Table of Enforcement Actions on the reverse side of this sheet as directed in the instructions for your permit application.

A. During the five years immediately preceding submission of this application, has the applicant been convicted in any jurisdiction of a criminal violation of any environmental law?

☐ Yes ☒ No

B. During the five years immediately preceding submission of this application, has a civil penalty been imposed upon the applicant in any state, including Connecticut, or federal judicial proceeding for any violation of an environmental law?

☐ Yes ☒ No

C. During the five years immediately preceding submission of this application, has a civil penalty exceeding five thousand dollars been imposed on the applicant in any state, including Connecticut, or federal administrative proceeding for any violation of an environmental law?

☐ Yes ☒ No

D. During the five years immediately preceding submission of this application, has any state, including Connecticut, or federal court issued any order or entered any judgement to the applicant concerning a violation of any environmental law?

☐ Yes ☒ No

E. During the five years immediately preceding submission of this application, has any state, including Connecticut, or federal administrative agency issued any order to the applicant concerning a violation of any environmental law?

☐ Yes ☒ No

Table of Enforcement Actions

(1) Type of Action	(2a) Date Commenced	(2b) Date Terminated	(3) Jurisdiction	(4) Case/Docket/ Order No.	(5) Description of Violation

☐ Check the box if additional sheets are attached. Copies of this form may be duplicated for additional space.

ATTACHMENT G

Title V Compliance Plan
DEEP-TV-APP-104)

Attachment G: Title V Compliance Plan (REQUIRED)

Applicant Name: **Borough of Naugatuck**

Site or Facility Name: **Naugatuck POTW**

Part I: Emissions Units in Compliance with Applicable Requirements

Emissions Unit Number	Applicable Requirements in Compliance
EU-**ALL**	**22a-174-2: Procedural requirement for new source review and Title V Permitting** **22a-174-3a: Permit to construct and operate stationary sources** **22a-174-4: Source Monitoring, Record Keeping, Reporting and Inspections** **22a-174-5: Sampling, Emissions Testing and Reporting** **22a-174-6: Air Pollution Emergency Procedures 22a-174-7: Malfunction of Control Equipment** **22a-174-8: Compliance Plans and schedules** **22a-174-9: Prohibition of Air Pollution (22a-174-9(a) = State-Only Requirement) 22a-174-10: Public Availability of Information** **22a-174-11: Prohibition Against Concealment or Circumvention 22a-174-12: Violation and Enforcement** **22a-174-13: Variances** **22a-174-14: Compliance with regulation no defense to nuisance claim** **22a-174-15: Severability** **22a-174-16: Responsibility to comply with applicable regulations** **22a-174-18(a): Visible Emissions 22a-174-18(b): Fugitive Dust** **22a-174-19 Control of Sulfur compound emissions** **22a-174-22: Nitrogen Oxides (NOx)** **22a-174-23: Odors (State-only Requirement) 22a-174-24: Ambient Air Quality Standards** **22a-174-26: Fees** **22a-174-29: HAPs (State-only Requirement) 22a-174-33: Title V Sources**
GEU-**002**	**40 CFR Part 60, Subpart Kb (NSPS for Volatile Organic Liquid Storage)** **CTDEP Permit for Process Equipment (Permit No. 109-0077)** **22a-174-20 Control of organic compounds emissions**
GEU-**005**	**22a-174-18(a): Opacity** **22a-174-18(a)(1): Particulate Matter** **22a-174-19: Fuel Sulfur Content** **22a-174-3c Limitations on Potential to emit for external combustion units, emergency engines, automotive refinishing operations, nonmetallic mineral processing equipment and surface coating operations.**

"I certify that the owner and operator of this facility will continue to comply with the applicable requirements listed above."

_____

Signature of Authorized Representative

☒ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to thissheet.

Site or Facility Name: **Naugatuck POTW**

Part I: Emissions Units in Compliance with Applicable Requirements

Emissions Unit Number	Applicable Requirements in Compliance
EU-007	**EU-ALL list, plus below** **22a-174-18(d) for Fuel Burning Equipment: NOx** **22a-174-3c: Limitations on potential to emit for external combustion unit, emergency generator, et al.** **40 CFR Subpart ZZZZ: Reciprocating Internal Combustion Engines (RICE) Includes areas sources**
EU-013	**EU-ALL list, plus below** **40 CFR, Part 60 Subpart A General Provisions** **40 CFR, Part 60 Subpart O Stds of Performance for Sewage Plants** **40 CFR, Part 60 Subpart MMMM** **40 CFR, Part 61 Subpart Subpart A General Provisions** **40 CFR, Part 61 Subpart C National Emission Standards for Beryllium** **40 CFR, Part 61 Subpart E National Emission Standards for Mercury** **40 CFR, Part 62 Subpart LLL** **40 CFR, Part 503 Tech. Stds for Use and Diposal of Sewage Sludge subpart E Incinerator** **CT DEEP Permit 109-0081**
EU-00	

"I certify that the owner and operator of this facility will continue to comply with the applicable requirements listed above."

_____

Signature of Authorized Representative

☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to thissheet.

Part II: Emissions Units in NON-COMPLIANCE with Applicable Requirements – Schedule for Compliance

Emissions Unit Number	Applicable Requirements In Non-Compliance	Remedial Measures For Bringing Source Into Compliance	Date Compliance Will Be Achieved
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			
EU-			

"I certify that the owner and operator of this facility will continue to comply with the applicable requirements listed above."

_____

Signature of Authorized Representative

After DEEP issues the Title V Permit, the Permittee shall submit:

- Certified progress reports to DEEP at least on March 1st and September 1st of each year pursuant to RCSA section 22a-174-33(q)(1).
- Compliance certifications to DEEP at least on March 1st of each year pursuant to RCSA section 22a-174-33(q)(2).

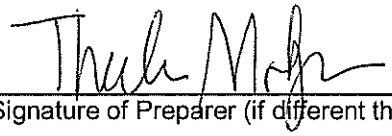
☐ Check here if additional sheets are required. If so, please reproduce this sheet and attach copies to this sheet.

Part III: Compliance Plan Certification

The authorized representative and the individual(s) responsible for actually preparing the compliance plan must sign this certification. A compliance plan will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief.

I understand that a false statement made in the submitted information may be punishable as a criminal offense, under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Signature of Authorized Representative	Date
Name of Authorized Representative (print or type)	Title (if applicable)
	1/11/19
Signature of Preparer (if different than above)	Date
Therlin Montgomery, Wright-Pierce	Project Manager
Name of Preparer (print or type)	Title (if applicable)

☐ Check here if additional signatures are required. If so, please reproduce this sheet and attach signed copies to this sheet.

ATTACHMENT H

Odor Control Systems

Attachement H

Odor Control Systems

Odor Control Equipment	Monitoring Equipment
Primary Scrubber:	ph & ORP: Hach model SC200
-treats primary tanks	Hach S/N 110559008978
Secondary Scrubber:	ph & ORP: Hach model SC200
-treats storage tanks,	Hach S/N 1509C0149978
thickeners, wetwell,	
dewatering building	

ATTACHMENT M

Calculations

Table M-1

Borough of Naugatuck
500 Cherry Street
Naugatuck, CT

Facility Emissions Summary

Source	Emission Unit ID	PM		PM10		SOx		CO		VOC		NOx		Pb		HAPs	
		Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)	Actual (ton/year)	Potential (ton/year)
Sludge Incinerator	(EU 013)	4.48	4.75	4.48	4.75	3.76	3.99	15.77	16.71	5.21	5.52	37.04	39.24	0.00	0.00	0.15	0.04
External Combustion	GEU-005	0.0230	0.207	0.0124	0.112	0.431	3.87	0.0576	0.517	3.92E-03	0.0352	0.230	2.07	1.43E-05	1.28E-04	7.91E-04	0.0071
Fuel Storage Tanks	(GEU 002)	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0	0	0	0	1.78E-04	3.19E-03
Internal Combustion Engine	(EU-007)	0.0013	0.02	0.0013	0.02	0.0214	0.29	0.014	0.3	0.0040	0.05	0.134	1.8	0	0	2.83E-04	0.0038
Facility Totals (tpy)		**4.5**	**5.0**	**4.5**	**4.9**	**4.2**	**8.1**	**15.8**	**17.5**	**5.2**	**5.6**	**37.4**	**43.1**	**0.0**	**0.0**	**0.1**	**0.0**

Note: Emissions were not calculated for emission units and activities that are contained in EPA's White Paper Trivial Source List or are listed in RCSA Section 22a-174-33(g)(3).

Table M-2

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT

Emissions Unit Summary

Emissions Unit	Source Location	Construct Date	Permit/Reg/ Order No.	Emissions Unit ID No.	Fuel Used/Stored Material Used	SCC Code	Emissions Group ID No.	Control Equipment	Control Efficiency %	Control Equipment Code
Buderus Boiler No. 1, 1.09 MMBtu/hr	Sludge Boiler Room	2016	N/A	EU027	No. 2 Fuel Oil	1-03-005-01	GEU005	N/A	N/A	N/A
Peerless O-705-FDA-WU Boiler, 0.71 MMBtu/hr	Admininstration Bldg	1972	N/A	EU005	No. 2 Fuel Oil	1-03-005-01	GEU005	N/A	N/A	N/A
Peerless JO-45-PF-WPCF Boiler, 0.30 MMBtu/hr	Service Bldg	1971	N/A	EU006	No. 2 Fuel Oil	1-03-005	GEU005	N/A	N/A	N/A
Generac 600 kW Emergency Generator	Sludge Boiler Room	2001	N/A	EU007	ULSD	2-02-001-02	N/A	N/A	N/A	N/A
Underground Storage Tank, 20,000 gallons	Outside	1990	N/A	EU009	No. 2 Fuel Oil	4-04-004-13/4-04-004-14	GEU002	N/A	N/A	N/A
Aboveground Storage Tank, 275 gallons	Service Building		N/A	EU011	ULSD	4-04-004-13/4-04-004-14	GEU002	N/A	N/A	N/A
Aboveground Storage Tank, 580 gallons	Lube Oil Storage Building		N/A	EU012	Waste Lube Oil	4-04-004-13/4-04-004-14	GEU002	N/A	N/A	N/A
Aboveground Storage Tank, 275 gallons	Generator Room		N/A	EU028	No. 2 Fuel Oil	4-04-004-13/4-04-004-14	GEU002	N/A	N/A	N/A
Aboveground Storage Tank, 275 gallons	Admin Building		N/A	EU029	No. 2 Fuel Oil	4-04-004-13/4-04-004-14	GEU002	N/A	N/A	N/A
Convault aboveground Storage Tank, 2000 gallons	Outside Generator Room		NA	EU059	ULSD	4-04-04-13/4-04-004-14	GEU002	N/A	N/A	N/A
Zimpro fluidized bed sewage sludge incinerator, 60,600 acfm	Incinerator Bldg	2002	CP/OP 109/11-0081	EU013	Sludge	5-01-005-16	N/A	Wet Scrubber, GORE Scrubber	99.91%	010, 053, 055
Preheat Burner	Incinerator Bldg	2002	N/A	EU015	No.2 Fuel Oil	1-03-005-1	GEU005	N/A	N/A	N/A
Hot Oil Emergency Tank, 4,000 gallons	Outside of Abel Room	2002	N/A	EU021	Oil	4-04-004-13/4-04-004-14	N/A	N/A	N/A	N/A
Hot Oil Sump, 595 gallons	Abel Room	2002	N/A	EU025	Oil	4-04-04-13/4-04-004-14	N/A	N/A	N/A	N/A

Table M-3

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Sludge Boiler Room

Emission Calculations and Assumptions
0.5-10 mmBtu Boiler, Commercial
No. 2 Fuel Oil Combustion
EU027

Fuel Higher Heating Value:		Actual Annual Fuel Consumption	
No. 2 Fuel Oil, (Btu/gal)	138,000	No. 2 Fuel Oil (gal/yr)	8,017
Maximum Firing Rate			
No. 2 Fuel Oil (gal/hr):	7.90	Sulfur content of Fuel Oil	0.26
Maximum Boiler Heat Input, (Btu/hr):		Potential Operating Hours/Year	
No. 2 Fuel Oil	1,090,000	(or permitted hours)	8,760

No .2 Fuel Oil Combustion

Pollutant	Emission Factor Source	Emission Factor	Emission Factor Units	Actual Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	Federal HAPs
PM	1	2.00	lbs/1000 gal	8.02E-03	0.0158	0.0692	
PM 10	1	1.08	lbs/1000 gal	4.33E-03	8.53E-03	0.0374	
SOx	1	37.44	lbs/1000 gal	0.150	0.296	1.30	
CO	1	5	lbs/1000 gal	0.0200	0.0395	0.173	
VOC	1	0.34	lbs/1000 gal	1.36E-03	2.69E-03	0.0118	
NOx	1	20	lbs/1000 gal	0.0802	0.158	0.692	
Lead	1	9.0	lbs/10^12 Btu	4.98E-06	9.81E-06	4.30E-05	yes
Ammonia	3	0.8	lbs/1000 gal	3.21E-03	6.32E-03	0.0277	
Antimony	na						yes
Arsenic	1	4.0	lbs/10^12 Btu	2.21E-06	4.36E-06	1.91E-05	yes
Benzene	na						yes
Beryllium	1	3.0	lbs/10^12 Btu	1.66E-06	3.27E-06	1.43E-05	yes
Cadmium	1	3	lbs/10^12 Btu	1.66E-06	3.27E-06	1.43E-05	yes
Chromium	1	3	lbs/10^12 Btu	1.66E-06	3.27E-06	1.43E-05	yes
Cobalt	na						yes
Copper	1	6	lbs/10^12 Btu	3.32E-06	6.54E-06	2.86E-05	
Formaldehyde	4	0.061	lbs/1000 gal	2.45E-04	4.82E-04	2.11E-03	yes
Manganese	1	6	lbs/10^12 Btu	3.32E-06	6.54E-06	2.86E-05	yes
Mercury	1	3	lbs/10^12 Btu	1.66E-06	3.27E-06	1.43E-05	yes
Nickel	1	3	lbs/10^12 Btu	1.66E-06	3.27E-06	1.43E-05	yes
Polycyclic Organic Matter (POM)	1	0.0033	lbs/1000 gal	1.32E-05	2.61E-05	1.14E-04	yes
Sulfuric Acid	2	0.64	lbs/1000 gal	2.55E-03	5.03E-03	0.0220	
Selenium	na						yes
			HAP Totals	2.77E-04	5.45E-04	2.39E-03	

EMISSION FACTOR SOURCES:

1. Emissions based on "Compilation of Air Pollutant Emission Factors (AP-42), Vol. 1: Stationary Point and Area Sources",Section 1.3, Supplement E, September, 1998.
2. Emission factor for sulfuric acid based on the assumption that all sulfur trioxide emitted will be transformed to sulfuric acid. AP-42 was used to determine emissions of sulfur trioxide. Emission factor for sulfuric acid is 2(S)(98mw/80mw) pounds per 1,000 gallons of fuel oil burned.
3. Emission based on "Toxic Air Pollutant Emission Factors - A Compilation for Selected Air Toxic Compounds and Sources"; EPA-450/2-90-011, October 1990.
4. Emissions based on Table 1.3-8, AP-42, Section 1.3, 5th Edition, Supplement E, September 1998.

Table M-4

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Sludge Boiler Room

Emission Calculations and Assumptions
0.5-10 mmBtu Boiler, Commercial
No. 2 Fuel Oil Combustion
EU026

Fuel Higher Heating Value:		Actual Annual Fuel Consumption	
No. 2 Fuel Oil, (Btu/gal)	138,000	No. 2 Fuel Oil (gal/yr)	8,017
Maximum Firing Rate			
No. 2 Fuel Oil (gal/hr):	8.39	Sulfur content of Fuel Oil	0.260
Maximum Boiler Heat Input, (Btu/hr):		Potential Operating Hours/Year	
No. 2 Fuel Oil	1,157,850	(or permitted hours)	8,760

No .2 Fuel Oil Combustion

Pollutant	Emission Factor Source	Emission Factor	Emission Factor Units	Actual Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	Federal HAPs
PM	1	2.00	lbs/1000 gal	8.02E-03	0.0168	0.0735	
PM 10	1	1.08	lbs/1000 gal	4.33E-03	9.06E-03	0.0397	
SOx	1	37.44	lbs/1000 gal	0.150	0.314	1.38	
CO	1	5	lbs/1000 gal	0.0200	0.0420	0.184	
VOC	1	0.34	lbs/1000 gal	1.36E-03	2.85E-03	0.0125	
NOx	1	20	lbs/1000 gal	0.0802	0.168	0.735	
Pb	1	9.0	lbs/10^12 Btu	4.98E-06	1.04E-05	4.56E-05	yes
Ammonia	3	0.8	lbs/1000 gal	3.21E-03	6.71E-03	0.0294	
Antimony	na						yes
Arsenic	1	4.0	lbs/10^12 Btu	2.21E-06	4.63E-06	2.03E-05	yes
Benzene	na						yes
Beryllium	1	3.0	lbs/10^12 Btu	1.66E-06	3.47E-06	1.52E-05	yes
Cadmium	1	3	lbs/10^12 Btu	1.66E-06	3.47E-06	1.52E-05	yes
Chromium	1	3	lbs/10^12 Btu	1.66E-06	3.47E-06	1.52E-05	yes
Cobalt	na						yes
Copper	1	6	lbs/10^12 Btu	3.32E-06	6.95E-06	3.04E-05	
Formaldehyde	4	0.061	lbs/1000 gal	2.45E-04	5.12E-04	2.24E-03	yes
Manganese	1	6	lbs/10^12 Btu	3.32E-06	6.95E-06	3.04E-05	yes
Mercury	1	3	lbs/10^12 Btu	1.66E-06	3.47E-06	1.52E-05	yes
Nickel	1	3	lbs/10^12 Btu	1.66E-06	3.47E-06	1.52E-05	yes
Polycyclic Organic Matter (POM)	1	0.0033	lbs/1000 gal	1.32E-05	2.77E-05	1.21E-04	yes
Sulfuric Acid	2	0.64	lbs/1000 gal	2.55E-03	5.34E-03	0.0234	
Selenium	na						yes
			HAP Totals	2.77E-04	5.79E-04	2.54E-03	

EMISSION FACTOR SOURCES:

1. Emissions based on "Compilation of Air Pollutant Emission Factors (AP-42), Vol. 1: Stationary Point and Area Sources",Section 1.3, Supplement E, September, 1998.
2. Emission factor for sulfuric acid based on the assumption that all sulfur trioxide emitted will be transformed to sulfuric acid. AP-42 was used to determine emissions of sulfur trioxide. Emission factor for sulfuric acid is 2(S)(98mw/80mw) pounds per 1,000 gallons of fuel oil burned.
3. Emission based on "Toxic Air Pollutant Emission Factors - A Compilation for Selected Air Toxic Compounds and Sources"; EPA-450/2-90-011, October 1990.
4. Emissions based on Table 1.3-8, AP-42, Section 1.3, 5th Edition, Supplement E, September 1998.

Table M-5

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Service Building

Emission Calculations and Assumptions
<0.5 mmBtu Boiler, Residential
No. 2 Fuel Oil Combustion
EU006

Fuel Higher Heating Value:		Actual Annual Fuel Consumption	
No. 2 Fuel Oil, (Btu/gal)	138,000	No. 2 Fuel Oil (gal/yr)	2,073
Maximum Firing Rate			
No. 2 Fuel Oil (gal/hr):	2.17	Sulfur content of Fuel Oil	0.26
Maximum Boiler Heat Input, (Btu/hr):		Potential Operating Hours/Year	
No. 2 Fuel Oil	299,925	(or permitted hours)	8,760

No .2 Fuel Oil Combustion

Pollutant	Emission Factor Source	Emission Factor	Emission Factor Units	Actual Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	Federal HAPs
PM	1	2.00	lbs/1000 gal	2.07E-03	4.35E-03	0.0190	
PM 10	1	1.08	lbs/1000 gal	1.12E-03	2.35E-03	0.0103	
SOx	1	37.44	lbs/1000 gal	0.0388	0.0814	0.356	
CO	1	5	lbs/1000 gal	5.18E-03	0.0109	0.0476	
VOC	1	0.34	lbs/1000 gal	3.52E-04	7.39E-04	3.24E-03	
NOx	1	20	lbs/1000 gal	0.0207	0.0435	0.190	
Pb	1	9.0	lbs/10^12 Btu	1.29E-06	2.70E-06	1.18E-05	yes
Ammonia	3	0.8	lbs/1000 gal	8.29E-04	1.74E-03	7.62E-03	
Antimony	na						yes
Arsenic	1	4.0	lbs/10^12 Btu	5.72E-07	1.20E-06	5.25E-06	yes
Benzene	na						yes
Beryllium	1	3.0	lbs/10^12 Btu	4.29E-07	9.00E-07	3.94E-06	yes
Cadmium	1	3	lbs/10^12 Btu	4.29E-07	9.00E-07	3.94E-06	yes
Chromium	1	3	lbs/10^12 Btu	4.29E-07	9.00E-07	3.94E-06	yes
Cobalt	na						yes
Copper	1	6	lbs/10^12 Btu	8.58E-07	1.80E-06	7.88E-06	
Formaldehyde	4	0.061	lbs/1000 gal	6.32E-05	1.33E-04	5.81E-04	yes
Manganese	1	6	lbs/10^12 Btu	8.58E-07	1.80E-06	7.88E-06	yes
Mercury	1	3	lbs/10^12 Btu	4.29E-07	9.00E-07	3.94E-06	yes
Nickel	1	3	lbs/10^12 Btu	4.29E-07	9.00E-07	3.94E-06	yes
Polycyclic Organic Matter (POM)	1	0.0033					yes
Sulfuric Acid	2	0.64	lbs/1000 gal	6.60E-04	1.38E-03	6.06E-03	
Selenium	na						yes
			HAP Totals	6.81E-05	1.43E-04	6.25E-04	

EMISSION FACTOR SOURCES:

1. Emissions based on "Compilation of Air Pollutant Emission Factors (AP-42), Vol. 1: Stationary Point and Area Sources",Section 1.3, Supplement E, September, 1998.

2. Emission factor for sulfuric acid based on the assumption that all sulfur trioxide emitted will be transformed to sulfuric acid. AP-42 was used to determine emissions of sulfur trioxide. Emission factor for sulfuric acid is 2(S)(98mw/80mw) pounds per 1,000 gallons of fuel oil burned.

3. Emission based on "Toxic Air Pollutant Emission Factors - A Compilation for Selected Air Toxic Compounds and Sources"; EPA-450/2-90-011, October 1990.

4. Emissions based on Table 1.3-8, AP-42, Section 1.3, 5th Edition, Supplement E, September 1998.

Table M-6

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Emission Calculations and Assumptions
SUMMARY OF EXTERNAL COMBUSTION EMISSIONS
GEM-005

Pollutant	Federal HAP	Actual Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)
PM		0.0150	0.0305	0.1334
PM 10		0.0081	0.0164	0.0720
SOx		0.281	0.57	2.50
CO		0.0376	0.076	0.333
VOC		2.55E-03	0.0052	0.0227
NOx		0.150	0.305	1.334
Pb	yes	9.33E-06	1.89E-05	8.28E-05
Ammonia		0.0060	0.0122	0.0534
Antimony	yes	0	0	0
Arsenic	yes	4.15E-06	8.41E-06	3.68E-05
Benzene	yes	0	0	0
Beryllium	yes	3.11E-06	6.30E-06	2.76E-05
Cadmium	yes	3.11E-06	6.30E-06	2.76E-05
Chromium	yes	3.11E-06	6.30E-06	2.76E-05
Cobalt	yes	0	0	0
Copper		6.22E-06	1.26E-05	5.52E-05
Formaldehyde	yes	4.58E-04	9.29E-04	4.07E-03
Manganese	yes	6.22E-06	1.26E-05	5.52E-05
Mercury	yes	3.11E-06	6.30E-06	2.76E-05
Nickel	yes	3.11E-06	6.30E-06	2.76E-05
Polycyclic Organic Matter (POM)	yes	2.14E-05	4.31E-05	1.89E-04
Sulfuric Acid		4.78E-03	0.0097	0.0425
Selenium	yes	0	0	0
	HAP Totals	5.15E-04	1.04E-03	4.57E-03

Table M-7

Borough of Naugatuck
500 Cherry Street, Naugatuck
Generac Diesel-Fueled Generator SD600
Model # 3417900100
Emission Calculations and Assumptions
<447 kW (<600 HP), Internal Combustion Engine
Diesel Powered
EU007

Potential Operating Hours (or permitted hours)	300
Type Fuel	Diesel (ULSD)
Fuel Higher Heating Value, (Btu/gal)	138,000
Gallons per Hour	46.2
Fuel Input in mmBtu per Hour	6.376
Output in kW	600
BHP Rating	900
Actual Operating Hours (from 2013 log data)	22.4
Annual Fuel Usage (gal/year)	1,035
Sulfur Content in Fuel	15.00

Pollutant	CAS#	Emission Factor Source	Emission Factor Fuel Input (lbs/mmBtu)	Emission Factor Fuel Input (g/bhp-hr)	Actual Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)	Federal HAPs
								yes
PM	na	2	0.02	0.06	1.33E-03	1.19E-01	1.79E-02	
PM10	na	1	0.02	0.06	1.33E-03	1.19E-01	1.79E-02	
SOx	na	1	0.30		2.14E-02	1.91E+00	2.87E-01	
CO	630-08-0	2	0.19	0.61	1.36E-02	1.21E+00	1.82E-01	
TOC	na	1	0.06	0.18	4.00E-03	3.57E-01	5.36E-02	
NOx	na	2	1.88	6.04	1.34E-01	1.20E+01	1.80E+00	
1,3 Butadiene	106-99-0	1	3.91E-05		2.79E-06	2.49E-04	3.74E-05	yes
Acetaldehyde	75-07-0	1	7.67E-04		5.48E-05	4.89E-03	7.34E-04	yes
Acrolein	107-02-8	1	9.25E-05		6.61E-06	5.90E-04	8.85E-05	yes
Aldehydes	na	1	0.07		5.00E-03	4.46E-01	6.69E-02	
Benzene	71-43-2	1	9.33E-04		6.66E-05	5.95E-03	8.92E-04	yes
Beryllium	7440-41-7	3	6.90E-08		4.93E-09	4.40E-07	6.60E-08	yes
Formaldehyde	50-00-0	1	1.18E-03		8.43E-05	7.52E-03	1.13E-03	yes
Mercury	7439-97-6	3	3.01E-07		2.15E-08	1.92E-06	2.88E-07	yes
Nickel	7440-02-0	na						yes
PAH	na	1	1.68E-04		1.20E-05	1.07E-03	1.61E-04	yes
Acenaphthene	83-32-9	1	1.42E-06		1.01E-07	9.05E-06	1.36E-06	
Acenaphthylene	208-96-8	1	5.06E-06		3.61E-07	3.23E-05	4.84E-06	
Anthracene	120-12-7	1	1.87E-06		1.34E-07	1.19E-05	1.79E-06	
Benzo(a)anthracene	56-55-3	1	1.68E-06		1.20E-07	1.07E-05	1.61E-06	
Benzo(a)pyrene	50-32-8	1	1.88E-07		1.34E-08	1.20E-06	1.80E-07	
Benzo(b)fluoranthene	205-99-2	1	9.91E-08		7.08E-09	6.32E-07	9.48E-08	
Benzo(g,h,I)perylene	191-24-2	1	4.89E-07		3.49E-08	3.12E-06	4.68E-07	
Benzo(k)fluoranthene	207-08-9	1	1.55E-07		1.11E-08	9.88E-07	1.48E-07	
Chrysene	218-01-9	1	3.53E-07		2.52E-08	2.25E-06	3.38E-07	
Dibenz(a,h)anthracene	53-70-3	1	5.83E-07		4.16E-08	3.72E-06	5.58E-07	
Fluoranthene	206-44-0	1	7.61E-06		5.43E-07	4.85E-05	7.28E-06	
Fluorene	86-73-7	1	2.92E-05		2.09E-06	1.86E-04	2.79E-05	
Ideno(1,2,3-cd)pyrene	193-39-5	1	3.75E-07		2.68E-08	2.39E-06	3.59E-07	
Naphthalene	91-20-3	1	8.48E-05		6.06E-06	5.41E-04	8.11E-05	yes
Phenanthrene	85-01-8	1	2.94E-05		2.10E-06	1.87E-04	2.81E-05	
Pyrene	129-00-0	1	4.78E-06		3.41E-07	3.05E-05	4.57E-06	
Propylene	115-07-1	1	2.58E-03		1.84E-04	1.64E-02	2.47E-03	
Sulfuric Acid	7664-93-9	3/4	3.10E-01		2.22E-02	1.98E+00	2.97E-01	
Toluene	108-88-3	1	4.09E-04		2.92E-05	2.61E-03	3.91E-04	yes
Xylenes	1330-20-7	1	2.85E-04		2.04E-05	1.82E-03	2.73E-04	yes
			Total HAPs		2.83E-04	2.52E-02	3.79E-03	yes

1. Emissions based on AP-42 Compilation of Air Pollutant Emission Factors Volume I: Stationary Point and Area Sources; Tables 3.3-1 and 3.3-2, 5th Edition - Supplement B November, 1996.
2. Emission factors in g/bhp-hr based on manufacturer specifications provided by Generac Power Systems, Inc.
3. Emissions based on Toxic Air Pollutant Emission Factors - A Compilation for Selected Air Toxics Compounds and Sources: October, 1990, EPA-450/2-90-011.
4 Emission factor for sulfuric acid is 8.9(S) ng/J. This corresponds to 20,688(S) lb/10^12 Btu.

Table M-8

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Zimpro Fluidized Bed Sewage Sludge Incinerator
3.5 Dry Ton/Hour
Emission Calculations and Assumptions
EU013

Actual Annual Quantity of Sludge (2013 total)
Burned (dry ton/yr): 28,932

Maximum Firing Rate
Sewage Sludge (dry ton/hr): 3.5

Maximum Annual Quantity of Sludge
Burned (dry ton/yr): 30,660

Sulfur Content of Fuel Oil (%): 0.3

Potential Operating Hours/Year
(or permitted hours): 8,760

Pollutant	Federal HAP	Emission Factor Source	Emission Factor	Emission Factor Units	Actual Emissions (ton/yr)	Potential Emissions (lb/hr)	Potential Emissions (ton/yr)
PM		1	0.31	lbs/dry ton sludge	4.48	1.09	4.75
PM10		1	0.31	lbs/dry ton sludge	4.48	1.09	4.75
SO2		1	0.26	lbs/dry ton sludge	3.76	0.91	3.99
NOx		1	2.56	lbs/dry ton sludge	37.03	8.96	39.24
CO		1	1.09	lbs/dry ton sludge	15.77	3.82	16.71
Pb	yes	1	1.28E-04	lbs/dry ton sludge	1.85E-03	4.48E-04	1.96E-03
THC		1	0.36	lbs/dry ton sludge	5.21	1.26	5.52
Sulfuric Acid		1	0.36	lbs/dry ton sludge	5.21	1.26	5.52
Hydrogen Chloride	yes	1	8.80E-03	lbs/dry ton sludge	0.13	0.03	0.13
Arsenic	yes	2	1.00E-05	lbs/dry ton sludge	1.45E-04	3.50E-05	1.53E-04
Beryllium	yes	1	2.20E-02	lb/24-hr period	4.02E-03	9.17E-04	4.02E-03
Cadmium	yes	2	2.00E-06	lbs/dry ton sludge	2.89E-05	7.00E-06	3.07E-05
Chromium	yes	2	6.00E-05	lbs/dry ton sludge	8.68E-04	2.10E-04	9.20E-04
Copper		3	6.00E-04	lbs/dry ton sludge	8.68E-03	2.10E-03	9.20E-03
Manganese	yes	3	6.00E-04	lbs/dry ton sludge	8.68E-03	2.10E-03	9.20E-03
Mercury	yes	5	6.00E-05	lbs/dry ton sludge	8.68E-04	2.10E-04	9.20E-04
Nickel	yes	2	1.00E-05	lbs/dry ton sludge	1.45E-04	3.50E-05	1.53E-04
Selenium	yes	3	4.00E-04	lbs/dry ton sludge	5.79E-03	1.40E-03	6.13E-03
Zinc		3	2.00E-03	lbs/dry ton sludge	2.89E-02	7.00E-03	3.07E-02
Benzene	yes	4	4.00E-04	lbs/dry ton sludge	5.79E-03	1.40E-03	6.13E-03
Bis(2-ethylhexyl)phthalate	yes	4	8.20E-02	lbs/dry ton sludge	1.19E+00	2.87E-01	1.26E+00
Carbon Tetrachloride	yes	4	2.40E-05	lbs/dry ton sludge	3.47E-04	8.40E-05	3.68E-04
Chlorobenzene	yes	4	1.00E-05	lbs/dry ton sludge	1.45E-04	3.50E-05	1.53E-04
Chloroform	yes	4	4.00E-03	lbs/dry ton sludge	5.79E-02	1.40E-02	6.13E-02
1,2-Dichlorobenzene		4	1.30E-01	lbs/dry ton sludge	1.88E+00	4.55E-01	1.99E+00
1,4-Dichlorobenzene	yes	4	4.80E-01	lbs/dry ton sludge	6.94E+00	1.68E+00	7.36E+00
Ethyl Benzene	yes	4	5.00E-05	lbs/dry ton sludge	7.23E-04	1.75E-04	7.67E-04
Methylene Chloride	yes	4	1.40E-03	lbs/dry ton sludge	2.03E-02	4.90E-03	2.15E-02
Naphthalene (POM)	yes	4	1.90E-01	lbs/dry ton sludge	2.75E+00	6.65E-01	2.91E+00
Perchloroethylene	yes	4	2.40E-04	lbs/dry ton sludge	3.47E-03	8.40E-04	3.68E-03
1,1,1-Trichloroethane	yes	4	5.20E-04	lbs/dry ton sludge	7.52E-03	1.82E-03	7.97E-03
Trichloroethene	yes	4	6.00E-05	lbs/dry ton sludge	8.68E-04	2.10E-04	9.20E-04
TOTAL HAPs					11.13	2.69	11.79

Emission Factor Sources:

1. Emission factors based on emission limits and standards listed in NSR Permit 109/11-0081 for the Zimpro fluidized bed sewage sludge incinerator.
2. Emission factors from AP-42 Table 2.2-8 "Metal Emission Factors for Fluidized Bed Sewage Sludge Incinerators" in Fifth Edition, Volume I Chapter 2: Solid Waste Disposal - Sewage Sludge Incineration.
3. Emission factors from AP-42 Table 2.2-8 "Metal Emission Factors for Fluidized Bed Sewage Sludge Incinerators" in Fifth Edition, Volume I Chapter 2: Solid Waste Disposal - Sewage Sludge Incineration for control by Venturi/Impingent.
4. Emission factors from AP-42 Table 2.2-7 "Acid Gas and Organic Compound Emission Factors for Fluidized Bed Sewage Sludge Incinerators" in Fifth Edition, Volume I Chapter 2: Solid Waste Disposal - Sewage Sludge Incineration.
5. Mercury emission factor of mercury is based on AP-42 Table 2.2-8 "Metal Emission Factors for Fluidized Bed Sewage Sludge Incinerators" in Fifth Edition, Volume I Chapter 2: Solid Waste Disposal - Sewage Sludge Incineration for control by Venturi/Impingent.
6. FBI system Emission factors for PM, HCl, CO, Dioxins/furans, NOx, SO2, and Pb are calculated assuming 2014 stack test dSCM and using emission limits of 40 CFR 62 Supart LLL.

Table M-9

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Naugatuck, Connecticut
Hazardous Air Pollutant Summary

Pollutants	CAS Number	Hazard Limiting Value (ug/m^3)	Actual Distance to the Property Line (feet)	(meter)	Property Distance Determined by Height $4.47(h-20)^{1.28}$ (meter)	The Greater of Actual Property Line, 10 meters Height Calc	Actual Stack Height to Grade (feet)	(meter)	Exhaust Flowrate (acfm)	(m^3/sec)	Maximum Emission Rate (lb/hr)	Maximum Allowable Stack Conc. (MASC) (ug/m^3)	Actual Stack Conc. (ASC) (ug/m^3)	Pass/Fail
Arsenic	7440-38-2	0.05	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	3.50E-05	117	1	Pass
Benzene	71-43-2	150	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	1.40E-03	352,160	25	Pass
Beryllium	7440-41-7	0.01	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	9.17E-04	23	16	Pass
Bis(2-ethylhexyl)phthalate	117-81-7	50	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	2.87E-01	117,387	5,165	Pass
Cadmium	7440-43-9	0.4	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	7.00E-06	939	0	Pass
Carbon Tetrachloride	56-23-5	300	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	8.40E-05	704,320	2	Pass
Chlorobenzene	108-90-7	7000	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	3.50E-05	16,434,142	1	Pass
Chloroform	67-66-3	250	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	1.40E-02	586,934	252	Pass
Chromium	7440-47-3	2.5	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	2.10E-04	5,869	4	Pass
Copper	7440-50-8	20	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	2.10E-03	46,955	38	Pass
Ethylbenzene	100-41-4	8700	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	1.75E-04	20,425,291	3	Pass
Hydrogen Chloride	7647-01-0	na	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	3.08E-02	na	554	na
Lead	7439-92-1	3	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	4.48E-04	7,043	8	Pass
Manganese	7439-96-5	20	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	2.10E-03	46,955	38	Pass
Mercury	7439-97-6	1	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	2.10E-04	2,348	4	Pass
Methylene Chloride	75-09-2	7000	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	4.90E-03	16,434,142	88	Pass
Naphthalene	91-20-3	1000	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	6.65E-01	2,347,735	11,968	Pass
Nickel	1313-99-1	0.3	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	3.50E-05	704	1	Pass
Perchloroethylene	127-18-4	1,700	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	8.40E-04	3,991,149	15	Pass
Selenium	na	4	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	1.40E-03	9,391	25	Pass
Sulfuric Acid	7664-93-9	20	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	1.26E+00	46,955	22,676	Pass
1,1,1-Trichloroethane	71-55-6	38000	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	1.82E-03	89,213,915	33	Pass
Trichloroethene	79-01-6	1,350	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	2.10E-04	3,169,442	4	Pass
Zinc	1314-13-2	100	206	62.79	285.37	285.37	150	45.72	14,835	7.0013	7.00E-03	234,773	126	Pass

Table M-10

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Emission Calculations and Assumptions
Fuel Oil Storage Tank Emissions Summary
GEU002

Tank ID Number	Tank Capacity	Emisson Unit	Product Stored	Potential* Emissions (lbs/year)	Actual** Emissions (lbs/year)
Incinerator No. 2 Fuel Oil Tank (UST)	20,000	EU-009	No. 2 Fuel Oil	31.7	1.09
NEW DIESEL STORAGE TANK (AST)	2,000	EU-059	ULSD	0.6	0.6
Service Bldg No. 2 Oil Tank (AST)	275	EU-011	No.2 Fuel Oil	1.88	0.1
Lube Oil Storage Building (AST)	580	EU-012	Waste Lube Oil	3.99	0.2
Generator Room No. 2 Oil Tank (AST)	275	EU-028	No. 2 Fuel Oil	1.48	0.12
Admin Bldg No. 2 Oil Tank (AST)	275	EU-029	No. 2 Fuel Oil	1.48	0.18
			Emission Totals	41.13	2.29

* Potential and actual emissions were calculated using EPA's TANKS4.09(b) and it was assumed that each tank had 500 turnovers per 8,760 hours.

** Actual emissions from Tanks4.09(d) using updated throughputs. Admin, Service, and Generator Room tank throughput based off of 2013 building fuel usage data.

Table M-11

Borough of Naugatuck
500 Cherry Street, Naugatuck, CT
Emission Calculations and Assumptions
Fuel Oil Storage Tank Emissions Summary
Hazardous Air Pollutant Summary
GEU002

Pollutant	Emission Factor Source	Emission Factor	Emission Factor Units	Potential Emissions (ton/year)	Actual Emissions (ton/year)
VOC	1			0.021	0.001
HAPs					
Benzene	2	0.671	wt%	1.38E-04	7.68E-06
Ethyl Benzene	2	2.18	wt%	4.48E-04	2.50E-05
Hexane	2	1.39	wt%	2.86E-04	1.59E-05
Toluene	2	6.68	wt%	1.37E-03	7.65E-05
Xylene	2	4.61	wt%	9.48E-04	5.28E-05
Total HAPs				3.19E-03	1.78E-04

1. Emission estimates are based on EPA's TANKS4.09(b).

2 Emission factors are based on American Petroleum Institute (API) correspondance to USEPA, OAQPS, December 1993.