

C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture & Landscape Architecture, P.C.

50 Century Hill Drive, Latham, NY 12110
518.786.7400 FAX 518.786.7299 ctmale@ctmale.com



June 1, 2022

Via Email and UPS

Mr. Ben Potter, RAPCE
NYSDEC Region 4 Division of Air Resources
1130 North Westcott Road
Schenectady, New York 12306

*RE: Air State Facility Permit Application Documents
Shelter Enterprises Inc. Cohoes, New York Facility
C.T. Male Associates Project No. 13.3449*

Dear Mr. Potter:

Please find enclosed the following materials relative to the Shelter Enterprises Inc. facility located in Cohoes, New York:

- Air State Facility Permit Application and Confidential Supporting Documentation/Engineer's Report;
- Protocol for Emission Point Modeling Using AERMOD Software; and
- Climate Leadership and Community Protection Act (CLCPA) Analysis.

As always, please feel free to contact me at (518) 786-7471 or via email at j.farron@ctmale.com should you have any questions or require additional information.

Respectfully submitted,

C.T. MALE ASSOCIATES

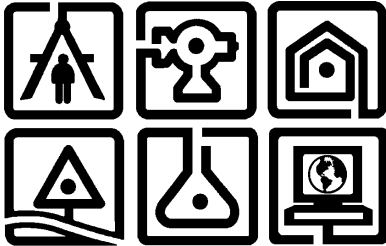
A handwritten signature in black ink that reads "Joseph A. Farron Jr.".

Joseph A. Farron, Jr.
Project Environmental Engineer

Ec: Dustin Pusatere (Shelter Enterprises), Nancy Garry (C.T. Male)

Enclosures

May 27, 2022



CONFIDENTIAL
SUPPORTING DOCUMENTATION

Application for New York State
Department of Environmental
Conservation (NYSDEC) State Facility
Permit

Prepared for:

SHELTER ENTERPRISES INC.
8 Saratoga Street
Cohoes, NY 12047

Prepared by:

C.T. MALE ASSOCIATES
50 Century Hill Drive
Latham, New York 12110
(518) 786-7400
FAX (518) 786-7299

C.T. Male Project No: 13.3449

Unauthorized alteration or addition to this document is a violation of the New York State Education Law.

**SUPPORTING DOCUMENTATION
APPLICATION FOR NYSDEC
STATE FACILITY PERMIT - SHELTER ENTERPRISES INC.
8 SARATOGA STREET, COHOES, NEW YORK**

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1.0 INTRODUCTION

C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. (C.T. Male) has prepared the attached application for a New York State Department of Environmental Conservation (NYSDEC) Air State Facility Permit for the Shelter Enterprises Inc. facility located at 8 Saratoga Street in the City of Cohoes, Albany County, New York (see Figure 1). Shelter Enterprises Inc. is a manufacturer of Expanded Polystyrene (EPS) building material products for residential, commercial, and civil markets. The facility's previous Air State Facility Permit (4-0103-00057/00002) expired on June 22, 2021 and this application seeks to reinstate a State Facility Permit to continue operations as previously permitted.

Emission Unit A-00001 consists of one (1) regulated process (Process 001), inclusive of expansion, aging and molding activities at the facility. Emission calculations and supporting documentation for these processes and for exempt combustion activities that occur at the facility are presented as Attachment A. A process flow diagram of facility operations is included in Attachment B. Pre-expander equipment was replaced in January 2016 and the Block Molding Machine was replaced in 2018 as part of efforts to improve capture efficiency and replace aging equipment. Facility operations also include a 6 Million British Thermal Units per hour (MMBTU/hr) natural gas-fired boiler which qualifies as an exempt emission source.

The previous State Facility Permit issued by the Department included a Regenerative Thermal Oxidizer (RTO), which replaced a decommissioned Steam Generating Thermal Oxidizer (SGTO). The SGTO was purchased by Shelter Enterprises in 2011, and after installation by the manufacturer and attempts to integrate it into the existing process, it was determined that the unit was incompatible with the equipment and processes already in place at the facility. Subsequently, a fire occurred at the facility in September 2012 and destroyed much of the physical plant equipment. The RTO was then purchased and installed and has been in operation since July 2013.

The RTO was installed to control the Volatile Organic Compounds (VOC) emissions associated with Emission Unit A-0001. Information relative to the RTO is included in Attachment C, and a site layout showing the approximate location of the RTO is included as Figure 2.

As with the previous State Facility Permit, this permit would limit the facility's potential to emit (PTE) VOC, and cap the facility out of the following regulatory requirements:

- Title V Facility Permit (6 NYCRR Part 201-6); and
- Future Maximum Achievable Control Technology (MACT) standards applicable to major sources of air emissions.

The State Facility Permit modification has been prepared in accordance with the requirements of the Official Compilation of New York Codes, Rules, and Regulations (NYCRR) Part 201-5, State Facility Permits. A copy of the State Facility Permit Modification is included within Attachment E.

2.0 SUMMARY OF EMISSION CALCULATIONS METHODOLOGY

2.1 Exempt and Trivial Activities

Emissions from the previously referenced exempt natural gas combustion activities at the facility are reported within the State Facility Permit Application based on the potential to emit of the 6 million BTU per hour boiler and the 2 million BTU per hour RTO. Emissions were calculated based on the maximum design capacity of the units and emission factors published within the USEPA's AP-42 (Chapter 1.4 for Natural Gas combustion in a commercial boiler). These emission calculations and supporting documentation are presented in Attachment A.

2.2 Expanded Polystyrene Processing Operations (Emission Unit A-00001)

Emissions from the facility's EPS manufacturing operations were calculated based on the annual bead usage at the facility and pentane content of the products used. These emission calculations and supporting documentation are presented in Attachment A. Pentane is contained within the raw material (beads) and is the only VOC that is emitted during the operation. Shelter Enterprises Inc. currently operates Process 001 with various grades of pentane containing beads. Emissions from the various unit operations are calculated based on the percentage of pentane lost during that step. These percentages were estimated based on Table 5-1 within "Control of VOC Emissions from Polystyrene Foam Manufacturing", EPA 450/3-90-020, September 1990.

In order to meet the requirements of 6 NYCRR Part 212, the RTO was installed in 2013 to replace the previous SGTO at the facility to control VOC emissions from Process 001. The replacement unit is a Ship & Shore 5000 SCFM capacity system that will provide a minimum 95% destruction efficiency of VOC (pentane) as demonstrated through stack testing. The facility requests a permit with a cap of 99,000 pounds (49.5 tons) VOC per year to cap out of Title V.

The emission calculations take into account the pentane released during expansion, aging, and mold operations at the facility, and estimate the exhaust from each of these operations routed to the RTO as well as the emissions from these operations which are not captured and routed to the RTO. Additional fugitive emissions associated with short-term finished product storage are not included within the emission calculations.

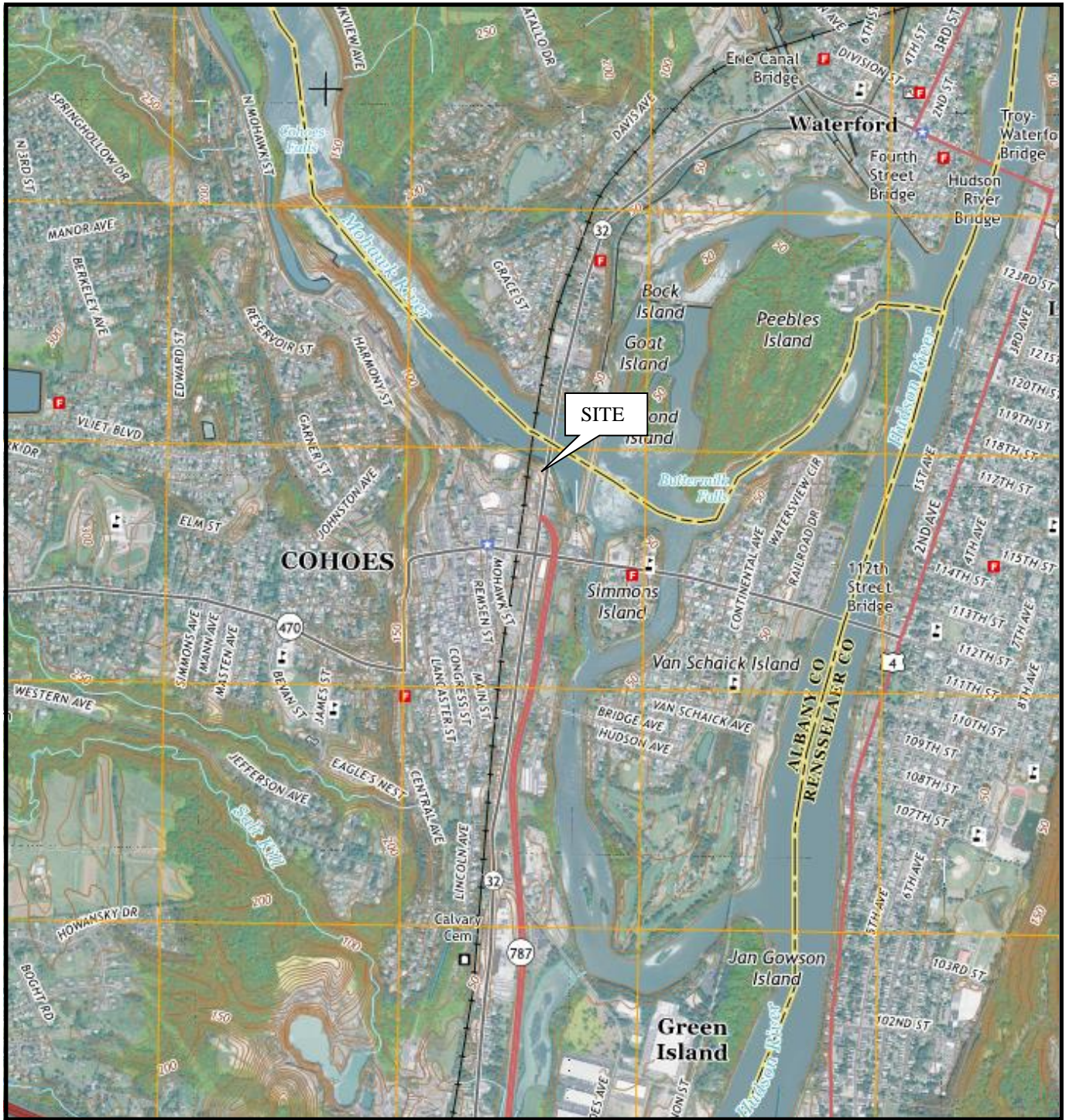
This approach continues to be used to estimate emissions in accordance with 6 NYCRR Part 201-2.1(b)(21)(i), which indicates that these emissions are not counted toward major source thresholds as the facility is not listed in the source categories within 6 NYCRR Part 201-2.1(b)(21)(iii). Using this methodology, the calculated 12-month VOC emissions from Emission Unit A-00001 for the period ending in December 2021 is 37,342 pounds.

3.0 PROPOSED RECORD KEEPING AND REPORTING PROCEDURES

To avoid being classified as a major source, Shelter Enterprises Inc. will cap emissions of VOC at less than 99,000 pounds per year. These emissions will be calculated on a monthly basis and a 12 month rolling total.

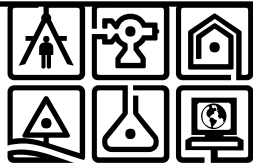
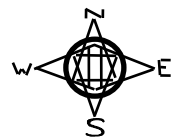
The records for the facility will be based on a monthly tracking of pentane-containing products, and will account for the amount of material processed and the control device efficiency coupled with the estimated capture efficiencies for each operation. Records of the actual product usage will be maintained on-site for the period specified by the NYSDEC within the Air Permit. These records will be submitted to the NYSDEC as specified within the Air Permit.

Figure 1
Site Location Map



MAP REFERENCE

United States Geological Survey
 7.5 Minute Series Topographic Maps
 Quadrangle: Troy North, N.Y. (2016)



CIVIL ENGINEERING
 ENVIRONMENTAL SERVICES
 SURVEY SERVICES
 LAND SERVICES
 ARCHITECTURE
 ENERGY & BUILDING SYSTEMS
 SERVICES
 ELECTRICAL ENGINEERING

FIGURE 1 SITE LOCATION MAP
SHELTER ENTERPRISES INC. FACILITY

C.T. MALE ASSOCIATES
 Engineering, Surveying, Architecture, Landscape
 Architecture & Geology, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110
 PHONE (518) 786-7400 FAX (518) 786-7299

CITY OF COHOES

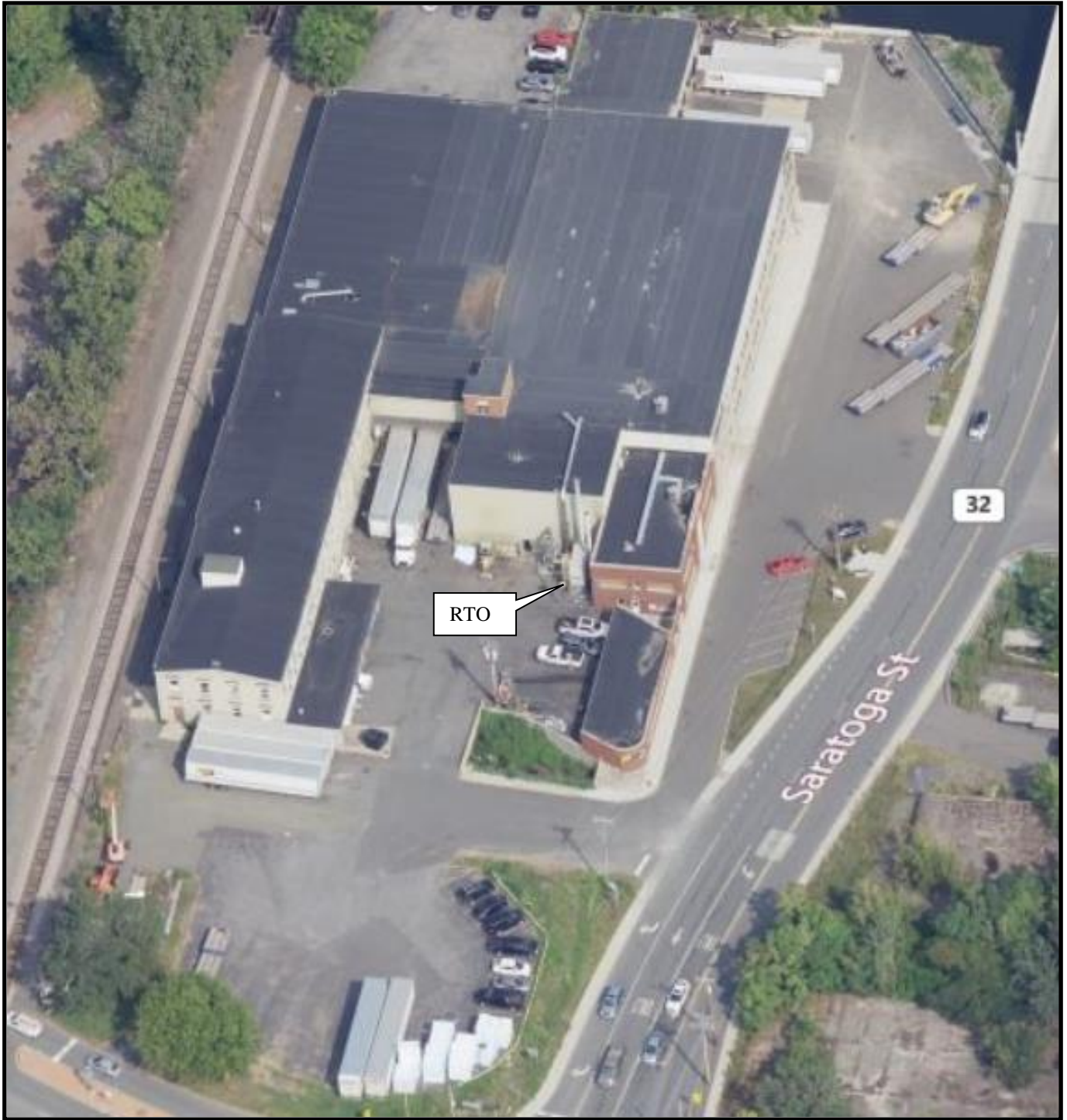
ALBANY COUNTY, NY

SCALE: ±1" = 2,000'

DRAFTER: J.FARRON

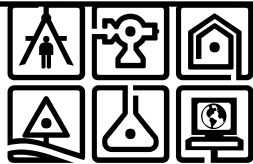
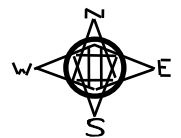
PROJECT No. 13.3449

Figure 2
Site Layout Map



MAP REFERENCE

Bing Maps Birds Eye View Imagery
Downloaded May 2022



CIVIL ENGINEERING
ENVIRONMENTAL SERVICES
SURVEY SERVICES
LAND SERVICES
ARCHITECTURE
ENERGY & BUILDING SYSTEMS
SERVICES
ELECTRICAL ENGINEERING

**FIGURE 2 SITE LAYOUT MAP
SHELTER ENTERPRISES INC. FACILITY**

CITY OF COHOES

ALBANY COUNTY, NY

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape
Architecture & Geology, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NEW YORK 12110
PHONE (518) 786-7400 FAX (518) 786-7299

SCALE: NOT SHOWN

DRAFTER: J.FARRON

PROJECT No. 13.3449

Attachment C
RTO Information



SHIP & SHORE
ENVIRONMENTAL, INC.



**Regenerative Thermal Oxidizer (RTO)
5,000 SCFM Capacity Systems
Shelter Enterprises – Cohoes, New York
June 20, 2013**

• **Project Details:**

This Volatile Organic Compound Abatement System (or VOC Abatement System) is designed to control such hydrocarbon emissions using a Ship & Shore Environmental, Inc. regenerative thermal oxidizer and a system of fans, filters and ducts.

The Regenerative Thermal Oxidizer (RTO) is designed with a combustion chamber section operating at approximately 1500 °F with a retention time of 0.50 second or greater. Below and at each end of the combustion chamber are heat storage sections containing a ceramic heat transfer media (two (2) heat storage sections total).

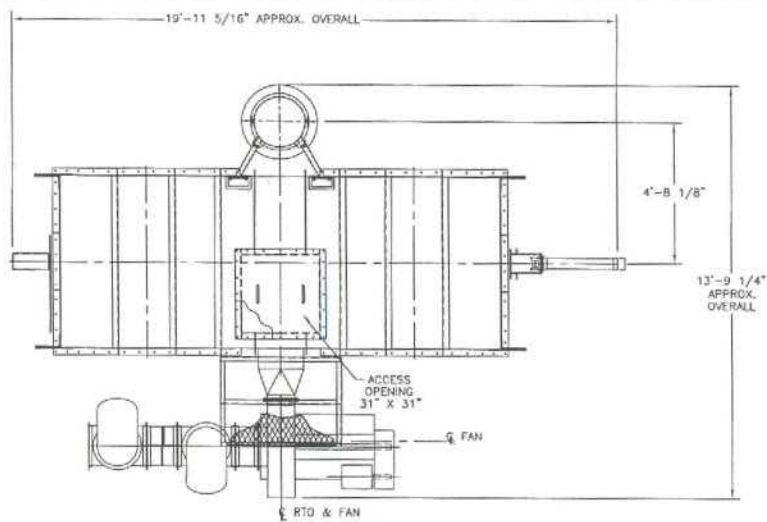
The exhaust gases from the combustion chamber travel through one (1) of the heat storage sections wherein they are cooled to between 176°F -206°F. As the gases flow through the section they raise the temperature of the ceramic heat transfer media.

Approximately every two (2) minutes the valve system causes the gas to flow in reverse so that the incoming air will pass through the just heated media and the combustion chamber exhaust gases travel through the other storage section. In this way the incoming gases will be heated to approximately 95% of the combustion chamber temperature.

Because of the high thermal efficiency of this system, relatively little fuel will be required to sustain the operating temperature. Often the fuel value of the incoming VOC will be enough to suffice.

The control panel consists of devices that are UL approved. A PLC (Programmable Logic Controller) supervises system's safeties and operating sequences. A burner flame relay (flame safeguard) monitors the burner limit and the burner flame with its ultra violet scanner. A separate high temperature limit controller protects the unit from over temperature. A chart recorder constantly controls and records the combustion chamber temperature.

The system is designed to operate at the optimum flow, in conjunction with press operations, meeting VOC requirements and increasing as necessary with production. The RTO will have a 5 to 1 turndown ratio and will operate at the required air flow, not full capacity.

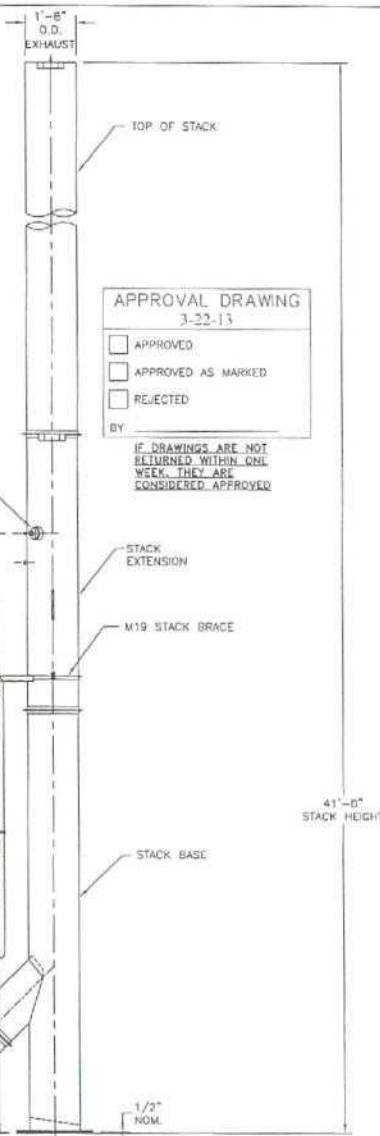


PLAN VIEW

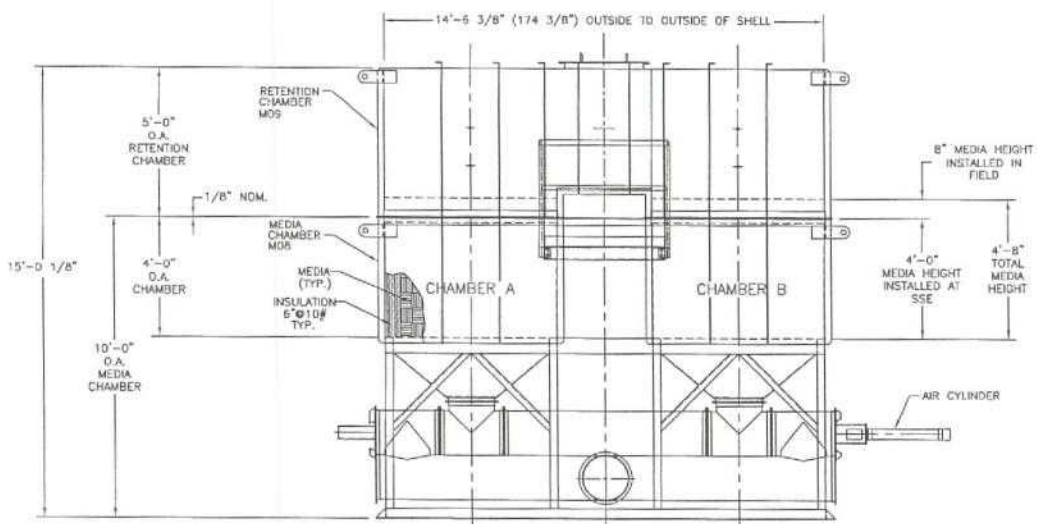
NOTE:

APPROXIMATE WEIGHT OF COMPLETED REGENERATIVE THERMAL OXIDIZER AND MISC. COMPONENTS:

UPPER SECTION (RET. CHAMBER)	= 4,387 LBS.
LOWER SECTION (MEDIA CHAMBER)	= 4,926 LBS.
MEDIA	= 11,499 LBS.
GRILL	= 256 LBS.
MANIFOLDS & VALVES	= 1,690 LBS.
EXHAUST STACK	= 1,850 LBS.
SKID	= 2,110 LBS.
BLOWER	= 900 LBS.
MISCELLANEOUS	= 1,000 LBS.
TOTAL WEIGHT	= 28,418 LBS.



RIGHT ELEVATION



ELEVATION VIEW

BLOWER NOT SHOWN IN THIS VIEW FOR CLARITY

APPROVAL DRAWING
3-22-13

APPROVED
 APPROVED AS MARKED
 REJECTED

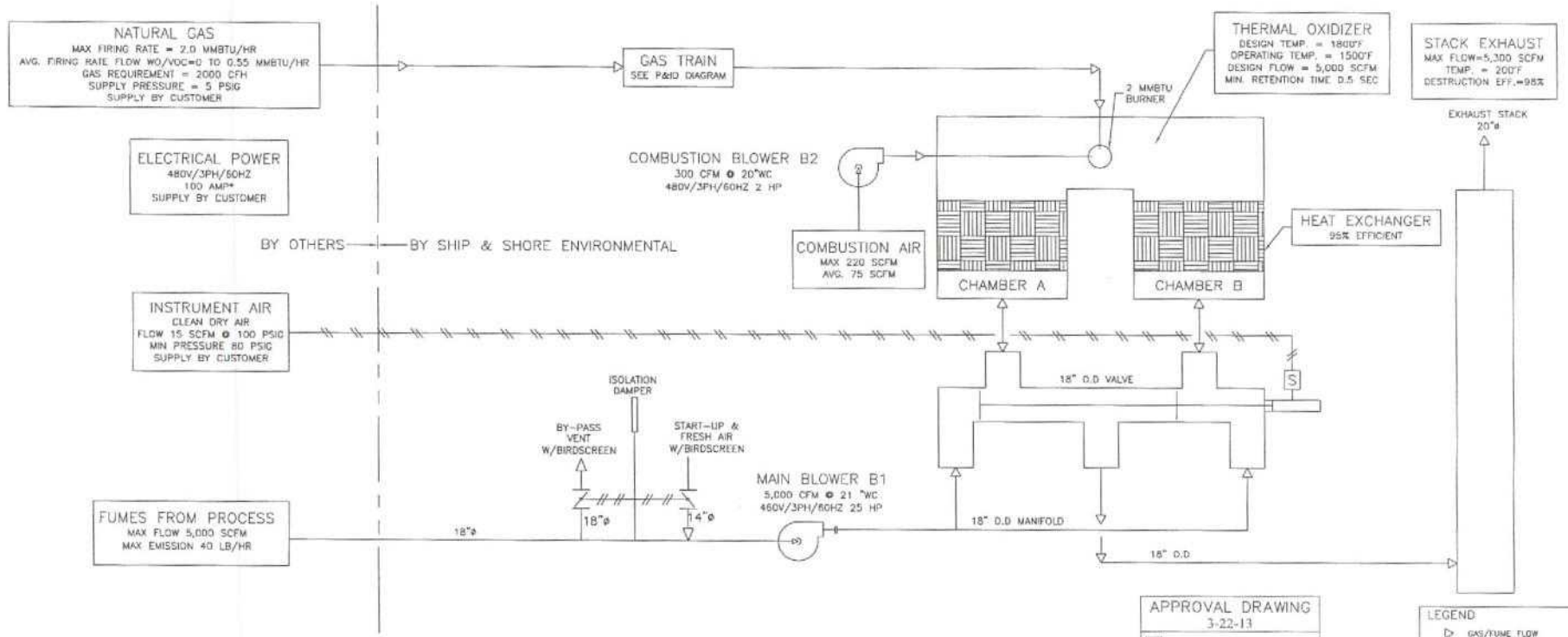
BY: _____

IF DRAWINGS ARE NOT RETURNED WITHIN ONE WEEK, THEY ARE CONSIDERED APPROVED

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF SHIP & SHORE ENVIRONMENTAL, INC. AND SHALL NOT BE DISCLOSED OR SOLD FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF SHIP & SHORE ENVIRONMENTAL, INC.		<p>SHIP & SHORE ENVIRONMENTAL, INC. 2474 N. PARK DRIVE - SHAW, ILL. 62 9022 TEL (618) 967-6213 - FAX (314) 967-2689</p>	<p>SHELTER ENTERPRISES</p> <p>2013-238-M02</p> <p>3,000 CFM RTO</p> <p>SEKONIA, MINNESOTA</p>	
REV	DESCRIPTION		DATE	BY / CK'D

2013-238-M02-REV-01 (REV. 12/13) 2013-238-M02-REV-01 (REV. 12/13) 2013-238-M02-REV-01 (REV. 12/13)

2001-112-PFD, 2003-007-PFD, 2004-117-PFD/6



APPROVAL DRAWING
3-22-13

APPROVED
 APPROVED AS MARKED
 REJECTED

BY _____

IF DRAWINGS ARE NOT RETURNED WITHIN ONE WEEK, THEY ARE CONSIDERED APPROVED

LEGEND

- ▷ GAS/TUNE FLOW
- ⇄ SLIDE GATE BALANCING DAMPER
- Z-FIRE DAMPER
- Z-MOTORIZED DAMPER
- Z-MANUAL DAMPER
- S SOLENOID
- AIR CYLINDER
- /// INSTRUMENT AIR

NOTE:
 *ELECTRICAL LOAD SUBJECT TO CHANGE DURING ENGINEERING DESIGN PHASE.
 *ALL DIMENSIONS APPROXIMATE.

REV	DESCRIPTION	DATE	BY	CHK'D

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF SHIP AND SHORE ENVIRONMENTAL, INC. AND SHALL NOT BE DISCLOSED OR USED FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF SHIP AND SHORE ENVIRONMENTAL, INC.

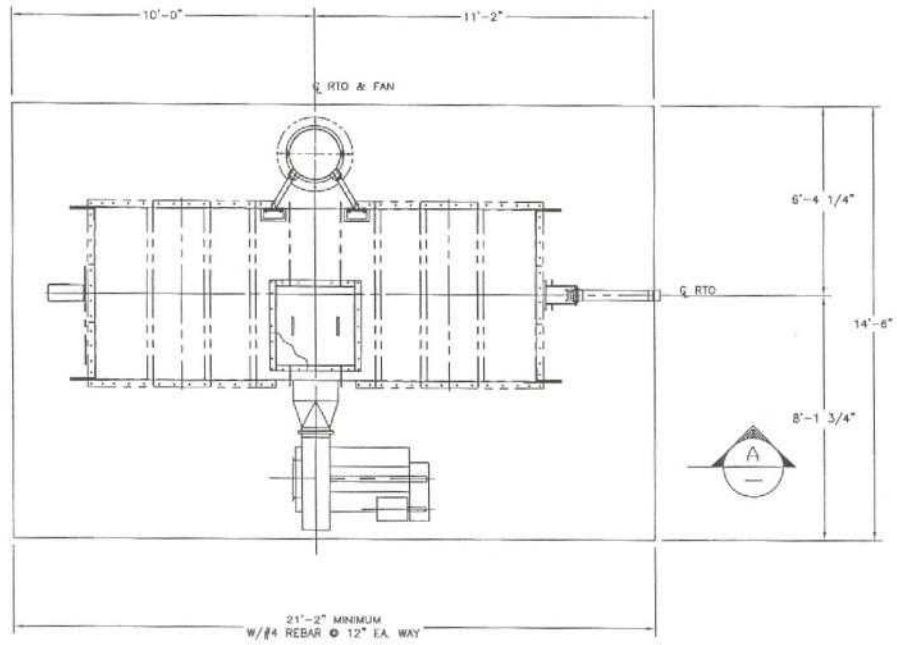


SHELTER ENTERPRISES

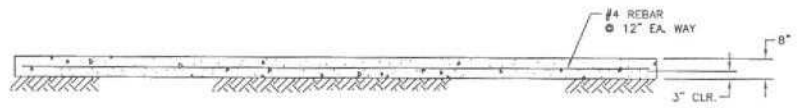
2474 N. PAUL DRIVE - SUITE 100, ILL. DA 30703
 TEL: (815) 961-0223 • FAX: (815) 961-1664

2013-308-PFD
 3-22-13

2000-031-141 2005-158-501-112 2009-239-501-11 2009-117-501-1



FOUNDATION PLAN



SECTION A

CONCRETE PAD RECOMMENDATIONS

APPROVAL DRAWING
3-22-13

APPROVED
 APPROVED AS MARKED
 REJECTED

BY _____

IF DRAWINGS ARE NOT RETURNED WITHIN ONE WEEK, THEY ARE CONSIDERED APPROVED

- NOTES:**
- FOR ANCHOR BOLTS USE RED HEAD TRUE BOLT ANCHOR (CBO NO. ER-1372 OR EQUAL)
 - MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AFTER 28 DAYS (f'c = 2500 PSI)
 - FOR REBAR USE GRADE 40 PER ASTM A-615.
 - ALLOWABLE FOUNDATION SOIL PRESSURE IS DESIGNED NOT TO EXCEED 1000 PSF AS PER TABLE 18-1-A OF UBC 97. IF LOCAL SOIL CONDITIONS WILL NOT SUPPORT THIS, NOTIFY SHIP AND SHORE ENVIRONMENTAL.
 - VERIFY EXISTING BUILDING FOOTINGS LOCATION PRIOR TO CONSTRUCTION.
 - B.C. ENGINEER TO SPECIFY CHANGES REQUIRED TO MATCH LOCAL CODES.

REV	DESCRIPTION	DATE	BY	CHK'D

THIS DRAWING CONTAINS PROPRIETARY AND PRIVILEGED INFORMATION OF SHIP & SHORE ENVIRONMENTAL, INC. AND SHALL NOT BE DISCLOSED OR USED FOR THE BENEFIT OF OTHERS WITHOUT PRIOR WRITTEN PERMISSION OF SHIP & SHORE ENVIRONMENTAL, INC.

SHIP & SHORE ENVIRONMENTAL, INC.
 3175 N. PALM DRIVE - SUITE 101, CA 94705
 TEL: (415) 951-0233 - FAX: (415) 951-0684

SHELTER ENTERPRISES
 2013-398-501
 EQUIPMENT FOUNDATION AND ANCHOR BOLTS
 3-22-13 2013-398-501

Attachment D
Confidentiality Justification

Confidentiality Justification

In accordance with 6 NYCRR Part 616.7, Shelter Enterprises Inc. is submitting this confidentiality justification with regards to specific proprietary process data which is included within this supporting documentation. This confidentiality justification identifies what information is to be considered proprietary and confidential.

This supporting documentation contains proprietary process data and information, the release of which may jeopardize the profitability and competitive operations of Shelter Enterprises Inc.

The following data, process information, or calculations are proprietary, or are based on proprietary information:

1. All emission calculations and technical data.

Factors Pertaining to Whether or Not a Trade Secret Exists

With respect to 6 NYCRR 616.7 (c)(vi)(a-f), Shelter Enterprises Inc. offers the following information to demonstrate that a trade secret exists. The responses are presented in the same order as in 6 NYCRR 616.7(c)(vi)(a-f).

(a) The request for confidentiality contains information which is not known outside of the business of Shelter Enterprises Inc., it's affiliated companies, it's customers or companies with which Shelter Enterprises Inc. has executed a confidentiality agreement.

(b) The information being considered a trade secret is known only by Shelter Enterprises Inc.'s employees, the employees of affiliated companies, and the employees of companies with which Shelter Enterprises Inc. has executed a confidentiality agreement, and only to the extent that they have the technical training and knowledge to understand how the operations work.

(c) Shelter Enterprises Inc. restricts access and guards the secrecy of the information considered as trade secrets to its' management level staff and personnel requiring access. Files and other documents containing information pertaining to trade secrets are maintained in secure locations at the companies management offices. Shelter

Enterprises Inc. protects the confidentiality of this information by requiring confidentiality agreements with consultants retained to provide services associated with the work.

(d) Shelter Enterprises Inc. has invested significant time and money in the research and development of its processes. These designs represent the product they sell to their customers. If this information were in the public domain Shelter Enterprises Inc. would lose its competitive advantage.

(e) Shelter Enterprises Inc. has expended significant resources in market research, contract negotiation and site development which are contingent on being able to produce the products.

(f) Shelter Enterprises Inc. does not allow the use of documents or designs without written permission. If Shelter Enterprises Inc. did not authorize the release of this information it could not be properly acquired and therefore would be difficult or illegal to obtain.

Attachment E

**Photocopy of Air State Facility Permit
Application**

New York State Department of Environmental Conservation
Air Permit Application



Department of Environmental Conservation

DEC ID											
4	-	0	1	0	3	-	0	0	0	5	7

Application ID																	
4	-	0	1	0	3	-	0	0	0	5	7	/	0	0	0	0	2

Application Type	
<input checked="" type="checkbox"/> State Facility	<input type="checkbox"/> Title V

Section I - Certification

Certification
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information required to complete this application, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Responsible Official Dustin Pusatere	Title Vice President
Signature <i>Dustin Pusatere</i>	Date 5/30/2022

Professional Engineer Certification
I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments as they pertain to the practice of engineering. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Professional Engineer Nancy E. Garry	NYS License No. 082523
Signature <i>Nancy E. Garry</i>	Date 5/27/2022

Section II - Identification Information

Type of Permit Action Requested				
<input type="checkbox"/> New	<input checked="" type="checkbox"/> Renewal	<input type="checkbox"/> Significant Modification	<input type="checkbox"/> Administrative Amendment	<input type="checkbox"/> Minor Modification
<input type="checkbox"/> Application for the construction of a new facility		<input type="checkbox"/> Application involves the construction of new emission unit(s)		

Facility Information	
Name Shelter Enterprises Inc.	
Location Address 8 Saratoga Street	
* City / Town / <input type="checkbox"/> Village Cohoes	Zip 12047-0608

Owner/Firm Information			Business Taxpayer ID		
Name Shelter Enterprises Inc.			141579382		
Street Address 8 Saratoga Street, PO Box 618					
City Cohoes	State/Province NY	Country US	Zip 12047-0608		
Owner Classification: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Municipal <input checked="" type="checkbox"/> Corporation/Partnership <input type="checkbox"/> Individual					

Owner/Firm Contact Information			
Name Dustin Pusatere		Phone 518-237-4100	
E-mail Address		Fax 518-237-0125	
Affiliation Shelter Enterprises Inc.		Title Vice President	
Street Address 8 Saratoga Street, PO Box 618			
City Cohoes	State/Province NY	Country US	Zip 12047-0608

Facility Contact Information			
Name Dustin Pusatere		Phone 518-237-4100	
E-mail Address		Fax 518-237-0125	
Affiliation Shelter Enterprises Inc.		Title Vice President	
Street Address 8 Saratoga Street, PO Box 618			
City Cohoes	State/Province NY	Country US	Zip 12047-0608



DEC ID											
4	-	0	1	0	3	-	0	0	0	5	7

Project Description		<input type="checkbox"/> Continuation Sheet(s)
<p>This application is being submitted to renew the State Facility Permit for the facility with no changes being sought as part of this application.</p>		

Section III - Facility Information

Facility Classification					
<input type="checkbox"/> Hospital	<input type="checkbox"/> Residential	<input type="checkbox"/> Educational/Institutional	<input type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Industrial	<input type="checkbox"/> Utility

Affected States (Title V Applications Only)					
<input type="checkbox"/> Vermont	<input type="checkbox"/> Massachusetts	<input type="checkbox"/> Rhode Island	<input type="checkbox"/> Pennsylvania	Tribal Land: _____	
<input type="checkbox"/> New Hampshire	<input type="checkbox"/> Connecticut	<input type="checkbox"/> New Jersey	<input type="checkbox"/> Ohio	Tribal Land: _____	

SIC Code(s)			NAICS Code(s)			
3086	2452					

Facility Description		<input type="checkbox"/> Continuation Sheet(s)
<p>Shelter Enterprises Inc. is an expanded polystyrene foam plastics manufacturing facility. The finished products are manufactured from pentane-containing polymeric beads which go through various manufacturing processes. Additional exempt and trivial activities also occur at the facility, including an exempt natural gas-fired boiler system.</p>		

Compliance Statements (Title V Applications Only)
<p>I certify that as of the date of this application the facility is in compliance with all applicable requirements. <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If one or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this application (the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block on page 8 of this form along with the compliance plan information required. For all emission units at the facility that are operating <u>in compliance</u> with all applicable requirements, complete the following:</p> <p><input type="checkbox"/> This facility will continue to be operated and maintained in such a manner as to assure compliance for the duration of the permit, except those emission units referenced in the compliance plan portion of this application.</p> <p><input type="checkbox"/> For all emission units subject to any applicable requirements that will become effective during the term of the permit, this facility will meet such requirements on a timely basis.</p> <p><input type="checkbox"/> Compliance certification reports will be submitted at least once per year. Each report will certify compliance status with respect to each applicable requirement, and the method used to determine the status.</p>

Facility Applicable Federal Requirements										<input type="checkbox"/> Continuation Sheet(s)
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
6	NYCRR	201	7							
6	NYCRR	211		1						
6	NYCRR	212								

Facility State Only Requirements										<input type="checkbox"/> Continuation Sheet(s)
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
6	NYCRR	201	1	4						
6	NYCRR	201	5							
6	NYCRR	211		2						

**New York State Department of Environmental Conservation
Air Permit Application**



**Department of
Environmental
Conservation**

DEC ID										
4	-	0	1	0	3	-	0	0	0	57

Facility Compliance Certification Continuation Sheet(s)

Rule Citation										
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
6	NYCRR	201	7							
<input checked="" type="checkbox"/> Applicable Federal Requirement <input type="checkbox"/> State Only Requirement			<input checked="" type="checkbox"/> Capping		CAS Number		Contaminant Name			
					0NY998-00-0		VOC			

Monitoring Information

Work Practice Involving Specific Operations Ambient Air Monitoring Record Keeping/Maintenance Procedures

Compliance Activity Description

Total Volatile Organic Compounds (VOC) emissions from all facility operations will be limited to less than 99,000 pounds during all consecutive 12 month periods to remain out of Title V permitting requirements.

Work Practice Type Code	Process Material			Reference Test Method	
	Code	Description			
Monitored Parameter				Manufacturer's Name/Model Number	
Code	Description				
Limit		Limit Units			
Upper	Lower	Code	Description		
99,000		26	99,000 pounds Total VOC		
Averaging Method		Monitoring Frequency		Reporting Requirements	
Code	Description	Code	Description	Code	Description
17	Annual Max Rolled Monthly	05	Monthly	15	Annually (Calendar)

Facility Emissions Summary Continuation Sheet(s)

CAS Number	Contaminant Name	Potential to Emit (tons/yr)	Actual Emissions (pounds/yr)
0NY075 - 00 - 5	PM-10	0.26	137
0NY750 - 02 - 5	PM-2.5	0.26	137
007446 - 09 - 5	Sulfur Dioxide	0.02	1
0NY210 - 00 - 0	Oxides of Nitrogen	3.44	1,805
000630 - 08 - 0	Carbon Monoxide	2.89	1,516
007439 - 92 - 1	Lead (elemental)	0	0
0NY998 - 00 - 0	Total Volatile Organic Compounds	49.5	37,442
0NY100 - 00 - 0	Total Hazardous Air Pollutants	0	0
0NY750 - 00 - 0	Carbon Dioxide Equivalents	4,122	2,166,235

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Section IV - Emission Unit Information

Emission Unit Description											<input type="checkbox"/> Continuation Sheet(s)
Emission Unit	A - 000001										
<p>Operation of an expanded polystyrene foam molding process line. The process essentially takes place in three steps consisting of Expansion, Aging, and Molding. An emission control system (RTO) is in place to capture and control emissions of pentane from production equipment involved in these three steps of the process.</p>											

Building Information					<input type="checkbox"/> Continuation Sheet(s)
Building ID	Building Name		Length (ft)	Width (ft)	Orientation
Main	Main Building		340	195	10

Emission Unit	Emission Unit Emissions Summary				<input type="checkbox"/> Continuation Sheet(s)
A - 000001					
CAS Number	Contaminant Name				
ONY998-00-0	VOC				
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
2,102,400	47.60	99,000	17.95	37,342	
CAS Number	Contaminant Name				
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
CAS Number	Contaminant Name				
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	
CAS Number	Contaminant Name				
ERP (lbs/yr)	Potential to Emit		Actual Emissions		
	(lbs/hr)	(lbs/yr)	(lbs/hr)	(lbs/yr)	

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Emission Point Information							<input type="checkbox"/> Continuation Sheet(s)
Emission Point	R T O O 1						
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section		
					Length (in)	Width (in)	
80	41	10	20	200			
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	
40.5	6626	4736.837	606.555	Main	95		
Emission Point							
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section		
					Length (in)	Width (in)	
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	
Emission Point							
Ground Elevation (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp. (°F)	Cross Section		
					Length (in)	Width (in)	
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	

Emission Source/Control Information								<input type="checkbox"/> Continuation Sheet(s)
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model Number	
ID	Type				Code	Description		
E X P N 2	I	01/2016	01/2016				PREEX 9000-B Pre-Expander	
Design Capacity	Design Capacity Units			Waste Feed		Waste Type		
	Code	Description		Code	Description	Code	Description	
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model Number	
ID	Type				Code	Description		
R T O O 1	K	2013	2013		127 Thermal Oxidation		Ship & Shore 5000 SCFM RTO	
Design Capacity	Design Capacity Units			Waste Feed		Waste Type		
	Code	Description		Code	Description	Code	Description	
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model Number	
ID	Type				Code	Description		
M O L D 2	I	2018	2018				Nuova Idropress Block Molding Machine	
Design Capacity	Design Capacity Units			Waste Feed		Waste Type		
	Code	Description		Code	Description	Code	Description	

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Process Information											
Emission Unit											
A	-	0	0	0	0	0	1	Process			
0										0	1
Process Description											
<p>Operation of an expanded polystyrene foam production line. Starting with polystyrene plastic beads that are fed into an expander where the bead is heated with steam and expand to the density required by the final foam product. The expanded beads or prepuff are then aged for 8-24 hours in 10 mesh storage bags to stabilize them prior to molding. The prepuff particles are then fed into a mold where the particles are fused together with steam into a block shaped product. Foam blocks are then cut into various dimensions for packaging and insulation materials using a heated wire cutting machine.</p>											
Source Classification Code (SCC)		Total Throughput		Throughput Quantity Units							
		Quantity/Hr	Quantity/Yr	Code	Description						
<input type="checkbox"/> Confidential <input type="checkbox"/> Operating at Maximum Capacity		Operating Schedule		Building	Floor/Location						
		Hours/Day	Days/Year								
				Main							
Emission Point Identifier(s)											
RTO01											
Emission Source/Control Identifier(s)											
EXP2		MOLD2		RTO01		STORA		PUFFA			
Emission Unit											
-								Process			
Process Description											
Source Classification Code (SCC)		Total Throughput		Throughput Quantity Units							
		Quantity/Hr	Quantity/Yr	Code	Description						
<input type="checkbox"/> Confidential <input type="checkbox"/> Operating at Maximum Capacity		Operating Schedule		Building	Floor/Location						
		Hours/Day	Days/Year								
Emission Point Identifier(s)											
Emission Source/Control Identifier(s)											

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Process Emissions Summary										<input type="checkbox"/> Continuation Sheet(s)				
Emission Unit	-										Process			
CAS Number	Contaminant Name				% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined					
Potential to Emit				Standard Units	Potential to Emit How Determined	Actual Emissions								
(lbs/hr)	(lbs/yr)	(standard units)				(lbs/hr)	(lbs/yr)							
Emission Unit	-										Process			
CAS Number	Contaminant Name				% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined					
Potential to Emit				Standard Units	Potential to Emit How Determined	Actual Emissions								
(lbs/hr)	(lbs/yr)	(standard units)				(lbs/hr)	(lbs/yr)							
Emission Unit	-										Process			
CAS Number	Contaminant Name				% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined					
Potential to Emit				Standard Units	Potential to Emit How Determined	Actual Emissions								
(lbs/hr)	(lbs/yr)	(standard units)				(lbs/hr)	(lbs/yr)							

Emission Source Emissions Summary										<input type="checkbox"/> Continuation Sheet(s)				
Emission Source											Process			
CAS Number	Contaminant Name				% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined					
Potential to Emit				Standard Units	Potential to Emit How Determined	Actual Emissions								
(lbs/hr)	(lbs/yr)	(standard units)				(lbs/hr)	(lbs/yr)							
Emission Source											Process			
CAS Number	Contaminant Name				% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined					
Potential to Emit				Standard Units	Potential to Emit How Determined	Actual Emissions								
(lbs/hr)	(lbs/yr)	(standard units)				(lbs/hr)	(lbs/yr)							
Emission Source											Process			
CAS Number	Contaminant Name				% Thruput	% Capture	% Control	ERP (lbs/hr)	ERP How Determined					
Potential to Emit				Standard Units	Potential to Emit How Determined	Actual Emissions								
(lbs/hr)	(lbs/yr)	(standard units)				(lbs/hr)	(lbs/yr)							

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Emission Unit	Emission Point	Process	Emission Source	Emission Unit Applicable Federal Requirements							<input type="checkbox"/> Continuation Sheet(s)		
				Title	Type	Part	Subpart	Section	Subdiv.	Parag.	Subparag.	Cl.	Subcl.

Emission Unit	Emission Point	Process	Emission Source	Emission Unit State Only Requirements							<input type="checkbox"/> Continuation Sheet(s)		
				Title	Type	Part	Subpart	Section	Subdiv.	Parag.	Subparag.	Cl.	Subcl.

Emission Unit Compliance Certification Continuation Sheet(s)

Rule Citation

Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause
6	NYCRR	212							

* Applicable Federal Requirement State Only Requirement Capping

Emission Unit	Emission Point	Process	Emission Source	CAS Number	Contaminant Name
A-00001		001	RTO01	0NY998-00-0	VOC

Monitoring Information

- Continuous Emission Monitoring
- Intermittent Emission Testing
- Ambient Air Monitoring
- Monitoring of a Process or Control Device Parameters as a Surrogate
- Work Practice Involving Specific Operations
- Record Keeping/Maintenance Procedures

Compliance Activity Description

The thermal oxidizer will be operated to maintain a minimum destruction removal efficiency of 95%. The oxidation chamber temperature will be monitored and maintained at a temperature of no less than the temperature at the time of the previous stack testing.

Work Practice Type Code	Process Material		Reference Test Method		
	Code	Description			
Monitored Parameter			Manufacturer's Name/Model Number		
Code	Description				
03	Temperature				
Limit		Limit Units			
Upper	Lower	Code	Description		
	1500	44	1500 Degrees Fahrenheit		
Averaging Method		Monitoring Frequency		Reporting Requirements	
Code	Description	Code	Description	Code	Description
61	Minimum - Not to Fall Below	01	Continuous	10	Upon Request

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Determination of Non-Applicability (Title V Applications Only) Continuation Sheet(s)

Rule Citation										
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
Emission Unit	Emission Point		Process	Emission Source			<input type="checkbox"/> Applicable Federal Requirement <input type="checkbox"/> State Only Requirement			

Non-Applicability Description

Rule Citation										
Title	Type	Part	Subpart	Section	Subdivision	Paragraph	Subparagraph	Clause	Subclause	
Emission Unit	Emission Point		Process	Emission Source			<input type="checkbox"/> Applicable Federal Requirement <input type="checkbox"/> State Only Requirement			

Non-Applicability Description

Compliance Plan Continuation Sheet(s)

For any emission units which are not in compliance at the time of permit application, the applicant shall complete the following:

Consent Order	Certified progress reports are to be submitted every 6 months beginning / /												
Emission Unit	Process	Emission Source	Applicable Federal Requirement										
			Title	Type	Part	Subpart	Section	Subdiv.	Parag.	Subparag.	Clause	Subcl.	
Remedial Measures and Intermediate Milestones											R/I	Date Scheduled	

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Request for Emission Reduction Credits										<input type="checkbox"/> Continuation Sheet(s)		
Emission Source												
Emission Reduction Description												
Contaminant Emission Reduction Data												
Baseline Period ____/____/____ to ____/____/____						Reduction						
						Date		Method				
CAS Number		Contaminant Name				ERC (lbs/yr)						
						Netting		Offset				
Facility to Use Future Reduction												
Name						Application ID						
						-					-	
Location Address												
<input type="checkbox"/> City/ <input type="checkbox"/> Town / <input type="checkbox"/> Village						State		Zip				
Use of Emission Reduction Credits										<input type="checkbox"/> Continuation Sheet(s)		
Emission Source												
Proposed Project Description												
Contaminant Emissions Increase Data												
CAS Number		Contaminant Name				Project Emission Potential (lbs/yr)						
Statement of Compliance												
<input type="checkbox"/> All facilities under the ownership of this "owner/firm" are operating <u>in compliance</u> with all applicable requirements and state regulations including any compliance certification requirements under Section 114(a)(3) of the Clean Air Act Amendments of 1990, or are meeting the schedule of a consent order.												
Source of Emission Reduction Credit - Facility												
Name						Permit ID						
						-					-	
Location Address												
<input type="checkbox"/> City/ <input type="checkbox"/> Town / <input type="checkbox"/> Village						State		Zip				
Emission Source	CAS Number	Contaminant Name				ERC (lbs/yr)						
						Netting		Offset				

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Supporting Documentation and Attachments	
Required Supporting Documentation	Date of Document
<input type="checkbox"/> List of Exempt Activities (attach form)	
<input checked="" type="checkbox"/> Plot Plan	
<input checked="" type="checkbox"/> Process Flow Diagram	
<input type="checkbox"/> Methods Used to Determine Compliance (attach form)	
<input checked="" type="checkbox"/> Emissions Calculations	
Optional Supporting Documentation	Date of Document
<input type="checkbox"/> Air Quality Model	
<input type="checkbox"/> Confidentiality Justification	
<input type="checkbox"/> Ambient Air Quality Monitoring Plan or Reports	
<input checked="" type="checkbox"/> Stack Test Protocol	
<input type="checkbox"/> Stack Test Report	
<input type="checkbox"/> Continuous Emissions Monitoring Plan	
<input type="checkbox"/> Lowest Achievable Emission Rate (LAER) Demonstration	
<input type="checkbox"/> Best Available Control Technology (BACT) Demonstration	
<input type="checkbox"/> Reasonably Available Control Technology (RACT) Demonstration	
<input type="checkbox"/> Toxic Impact Assessment (TIA)	
<input type="checkbox"/> Environmental Rating Demonstration	
<input type="checkbox"/> Operational Flexibility Protocol/Description of Alternate Operating Scenarios	
<input type="checkbox"/> Title IV Permit Application	
<input type="checkbox"/> Emission Reduction Credit (ERC) Quantification (attach form)	
<input type="checkbox"/> Baseline Period Demonstration	
<input type="checkbox"/> Use of Emission Reduction Credits (attach form)	
<input type="checkbox"/> Analysis of Contemporaneous Emissions Increase/Decrease	
Other Supporting Documentation	Date of Document
Air Dispersion Modeling Protocol	Document to follow
CLCPA Evaluation Protocol	Document to follow

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Section IV - Emission Unit Information

Emission Source/Control (continuation)										
Emission Unit		A - 0 0 0 0 0 1								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
STORA	I						Aging - 10 mesh storage bags			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
PUFFA	I						Prepuff			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		