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JAN 17 2018  
**OHIO EPA NEDO**

# **Part B Permit Application Class 3 Modification & Renewal**

**United Initiators, Inc.**  
Elyria, Ohio

**RECEIVED**  
JAN 17 2018  
**OHIO EPA NEDO**

**December 11, 2017**

United States Environmental Protection Agency  
RCRA SUBTITLE C SITE IDENTIFICATION FORM



## 1. Reason for Submittal (Select only one.)

<input type="checkbox"/>	Obtaining or updating an EPA ID number for an on-going regulated activity that will continue for a period of time. (Includes HSM activity)
<input type="checkbox"/>	Submitting as a component of the Hazardous Waste Report for _____ (Reporting Year)
<input type="checkbox"/>	Site was a TSD facility and/or generator of > 1,000 kg of hazardous waste, > 1 kg of acute hazardous waste, or > 100 kg of acute hazardous waste spill cleanup in <b>one or more months of the reporting year</b> (or State equivalent LQG regulations)
<input type="checkbox"/>	Notifying that regulated activity is no longer occurring at this Site
<input type="checkbox"/>	Obtaining or updating an EPA ID number for conducting Electronic Manifest Broker activities
<input checked="" type="checkbox"/>	Submitting a new or revised Part A Form

## 2. Site EPA ID Number

O	H	D	0	4	6	2	0	2	6	0	2
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## 3. Site Name

United Initiators, Inc.
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## 4. Site Location Address

Street Address <b>555 Garden Street</b>		
City, Town, or Village <b>Elyria</b>	County <b>Lorain</b>	
State <b>OH</b>	Country <b>USA</b>	Zip Code <b>44035</b>

## 5. Site Mailing Address

☒ Same as Location Address

Street Address		
City, Town, or Village		
State	Country	Zip Code

## 6. Site Land Type

<input checked="" type="checkbox"/> Private	<input type="checkbox"/> County	<input type="checkbox"/> District	<input type="checkbox"/> Federal	<input type="checkbox"/> Tribal	<input type="checkbox"/> Municipal	<input type="checkbox"/> State	<input type="checkbox"/> Other
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## 7. North American Industry Classification System (NAICS) Code(s) for the Site (at least 5-digit codes)

A. (Primary) <b>325199</b>	C.
B.	D.



## 8. Site Contact Information

☒ Same as Location Address

First Name	<b>Jeff</b>	MI	<b>B</b>	Last Name	<b>Lenchak</b>
Title <b>EHSS &amp; Regulatory Manager</b>					
Street Address					
City, Town, or Village					
State		Country		Zip Code	
Email <b>jeff.lenchak@united-in.com</b>					
Phone <b>440-326-2447</b>		Ext		Fax <b>440-387-4809</b>	

## 9. Legal Owner and Operator of the Site

## A. Name of Site's Legal Owner

☒ Same as Location Address

Full Name <b>Untied Initiators, Inc.</b>			Date Became Owner (mm/dd/yyyy) <b>7/1/2008</b>		
Owner Type <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other					
Street Address					
City, Town, or Village					
State		Country		Zip Code	
Email					
Phone <b>440-323-3112</b>		Ext		Fax	
Comments					

## B. Name of Site's Legal Operator

☒ Same as Location Address

Full Name <b>United Initiators, Inc.</b>			Date Became Operator (mm/dd/yyyy) <b>7/1/2008</b>		
Operator Type <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Tribal <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other					
Street Address					
City, Town, or Village					
State		Country		Zip Code	
Email					
Phone <b>440-323-3112</b>		Ext		Fax	
Comments					

**10. Type of Regulated Waste Activity (at your site)**

Mark "Yes" or "No" for all current activities (as of the date submitting the form); complete any additional boxes as instructed.

**A. Hazardous Waste Activities**

<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	1. Generator of Hazardous Waste—If "Yes", mark only one of the following—a, b, c	
<input checked="" type="checkbox"/>	a. LQG	-Generates, in any calendar month (includes quantities imported by importer site) 1,000 kg/mo (2,200 lb/mo) or more of non-acute hazardous waste; or - Generates, in any calendar month, or accumulates at any time, more than 1 kg/mo (2.2 lb/mo) of acute hazardous waste; or - Generates, in any calendar month or accumulates at any time, more than 100 kg/mo (220 lb/mo) of acute hazardous spill cleanup material.
<input type="checkbox"/>	b. SQG	100 to 1,000 kg/mo (220-2,200 lb/mo) of non-acute hazardous waste and no more than 1 kg (2.2 lb) of acute hazardous waste and no more than 100 kg (220 lb) of any acute hazardous spill cleanup material.
<input type="checkbox"/>	c. VSQG	Less than or equal to 100 kg/mo (220 lb/mo) of non-acute hazardous waste.
If "Yes" above, indicate other generator activities in 2 and 3, as applicable.		
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Short-Term Generator (generates from a short-term or one-time event and not from on-going processes). If "Yes", provide an explanation in the Comments section.	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	3. Mixed Waste (hazardous and radioactive) Generator	
<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	4. Treater, Storer or Disposer of Hazardous Waste—Note: A hazardous waste Part B permit is required for these activities.	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	5. Receives Hazardous Waste from Off-site	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	6. Recycler of Hazardous Waste	
<input type="checkbox"/>	a. Recycler who stores prior to recycling	
<input type="checkbox"/>	b. Recycler who does not store prior to recycling	
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	7. Exempt Boiler and/or Industrial Furnace—If "Yes", mark all that apply.	
<input type="checkbox"/>	a. Small Quantity On-site Burner Exemption	
<input type="checkbox"/>	b. Smelting, Melting, and Refining Furnace Exemption	

**B. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g. D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001						
D003						

**C. Waste Codes for State Regulated (non-Federal) Hazardous Wastes.** Please list the waste codes of the State hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed.


**11. Additional Regulated Waste Activities (NOTE: Refer to your State regulations to determine if a separate permit is required.)****A. Other Waste Activities**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1. Transporter of Hazardous Waste—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Transporter
<input type="checkbox"/>	b. Transfer Facility (at your site)
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Underground Injection Control
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	3. United States Importer of Hazardous Waste
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	4. Recognized Trader—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Importer
<input type="checkbox"/>	b. Exporter
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	5. Importer/Exporter of Spent Lead-Acid Batteries (SLABs) under 40 CFR 266 Subpart G—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Importer
<input type="checkbox"/>	b. Exporter

**B. Universal Waste Activities**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1. Large Quantity Handler of Universal Waste (you accumulate 5,000 kg or more) - If “Yes” mark all that apply. Note: Refer to your State regulations to determine what is regulated.
<input type="checkbox"/>	a. Batteries
<input type="checkbox"/>	b. Pesticides
<input type="checkbox"/>	c. Mercury containing equipment
<input type="checkbox"/>	d. Lamps
<input type="checkbox"/>	e. Other (specify) _____
<input type="checkbox"/>	f. Other (specify) _____
<input type="checkbox"/>	g. Other (specify) _____
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Destination Facility for Universal Waste Note: A hazardous waste permit may be required for this activity.

**C. Used Oil Activities**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	1. Used Oil Transporter—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Transporter
<input type="checkbox"/>	b. Transfer Facility (at your site)
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	2. Used Oil Processor and/or Re-refiner—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Processor
<input type="checkbox"/>	b. Re-refiner
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	3. Off-Specification Used Oil Burner
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	4. Used Oil Fuel Marketer—If “Yes”, mark all that apply.
<input type="checkbox"/>	a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
<input type="checkbox"/>	b. Marketer Who First Claims the Used Oil Meets the Specifications

**12. Eligible Academic Entities with Laboratories**—Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR 262 Subpart K.

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	A. Opting into or currently operating under 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories—If “Yes”, mark all that apply. Note: See the item-by-item instructions for definitions of types of eligible academic entities.
<input type="checkbox"/>	1. College or University
<input type="checkbox"/>	2. Teaching Hospital that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/>	3. Non-profit Institute that is owned by or has a formal written affiliation with a college or university
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	B. Withdrawing from 40 CFR 262 Subpart K for the management of hazardous wastes in laboratories.

**13. Episodic Generation**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Are you an SQG or VSQG generating hazardous waste from a planned or unplanned episodic event, lasting no more than 60 days, that moves you to a higher generator category. If “Yes”, you must fill out the Addendum for Episodic Generator.
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**14. LQG Consolidation of VSQG Hazardous Waste**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Are you an LQG notifying of consolidating VSQG Hazardous Waste Under the Control of the Same Person pursuant to 40 CFR 262.17(f)? If “Yes”, you must fill out the Addendum for LQG Consolidation of VSQGs hazardous waste.
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**15. Notification of LQG Site Closure for a Central Accumulation Area (CAA) (optional) OR Entire Facility (required)**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	LQG Site Closure of a Central Accumulation Area (CAA) or Entire Facility.
A. <input type="checkbox"/> Central Accumulation Area (CAA) <input type="checkbox"/> Entire Facility	
B. Expected closure date: _____ mm/dd/yyyy	
C. Requesting new closure date: _____ mm/dd/yyyy	
D. Date closed : _____ mm/dd/yyyy	
<input type="checkbox"/> 1. In compliance with the closure performance standards 40 CFR 262.17(a)(8) <input type="checkbox"/> 2. Not in compliance with the closure performance standards 40 CFR 262.17(a)(8)	

**16. Notification of Hazardous Secondary Material (HSM) Activity**

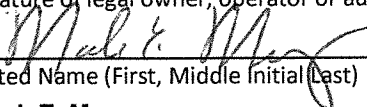
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	A. Are you notifying under 40 CFR 260.42 that you will begin managing, are managing, or will stop managing hazardous secondary material under 40 CFR 260.30, 40 CFR 261.4(a)(23), (24), or (27)? If “Yes”, you must fill out the Addendum to the Site Identification Form for Managing Hazardous Secondary Material.
<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	B. Are you notifying under 40 CFR 260.43(a)(4)(iii) that the product of your recycling process has levels of hazardous constituents that are not comparable to or unable to be compared to a legitimate product or intermediate but that the recycling is still legitimate? If “Yes”, you may provide explanation in Comments section. You must also document that your recycling is still legitimate and maintain that documentation on site.

**17. Electronic Manifest Broker**

<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Are you notifying as a person, as defined in 40 CFR 260.10, electing to use the EPA electronic manifest system to obtain, complete, and transmit an electronic manifest under a contractual relationship with a hazardous waste generator?
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**18. Comments** (include item number for each comment)


**19. 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 who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, 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. **Note: For the RCRA Hazardous Waste Part A permit Application, all owners and operators must sign (see 40 CFR 270.10(b) and 270.11).**

Signature of legal owner, operator or authorized representative 	Date (mm/dd/yyyy) 12/11/2017
Printed Name (First, Middle Initial Last) <b>Mark E. Mroz</b>	Title <b>Vice President, Site Manager</b>
Email <b>mark.mroz@united-in.com</b>	

Signature of legal owner, operator or authorized representative	Date (mm/dd/yyyy)
Printed Name (First, Middle Initial Last)	Title
Email	

## United States Environmental Protection Agency

## HAZARDOUS WASTE PERMIT PART A FORM



## 1. Facility Permit Contact

First Name	<b>Jeff</b>	MI	<b>B</b>	Last Name	<b>Lenchak</b>
Title	<b>EHSS &amp; Regulatory Manager</b>				
Email	<b>jeff.lenchak@united-in.com</b>				
Phone	<b>440-326-2447</b>	Ext		Fax	

## 2. Facility Permit Contact Mailing Address

Street Address	<b>555 Garden Street</b>				
City, Town, or Village	<b>Elyria</b>				
State	<b>OH</b>	Country	<b>USA</b>	Zip Code	<b>44035</b>

## 3. Facility Existence Date (mm/dd/yyyy)

<b>1/1/1965</b>
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## 4. Other Environmental Permits

A. Permit Type	B. Permit Number												C. Description
<b>N</b>	<b>O</b>	<b>H</b>	<b>R</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>				<b>MSGP NPDES Permit</b>
<b>E</b>	<b>P</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>5</b>	<b>2</b>	<b>8</b>	<b>6</b>					<b>Ohio Air Permit PTIO</b>
<b>E</b>	<b>1</b>	<b>5</b>	<b>1</b>										<b>City of Elyria Industrial WW Discharge Per</b>

## 5. Nature of Business


6. Process Codes and Design Capacities

Line Number		A. Process Code			B. Process Design Capacity		C. Process Total Number of Units	D. Unit Name
					(1) Amount	(2) Unit of Measure		
1		T	8	0	4.2	X	001	

7. Description of Hazardous Wastes (Enter codes for Items 7.A, 7.C and 7.D(1) )

Line No.	A. EPA Hazardous Waste No.					B. Estimated Annual Qty of Waste	C. Unit of Measure	D. Processes									
								(1) Process Codes								(2) Process Description (if code is not entered in 7.D1))	
1		D	0	0	1	8	E	T	8	0							
2		D	0	0	3	8	E	T	8	0							

8. Map

Attach to this application a topographical map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all spring, rivers, and other surface water bodies in this map area. See instructions for precise requirements.

9. Facility Drawing

All existing facilities must include a scale drawing of the facility. See instructions for more detail.

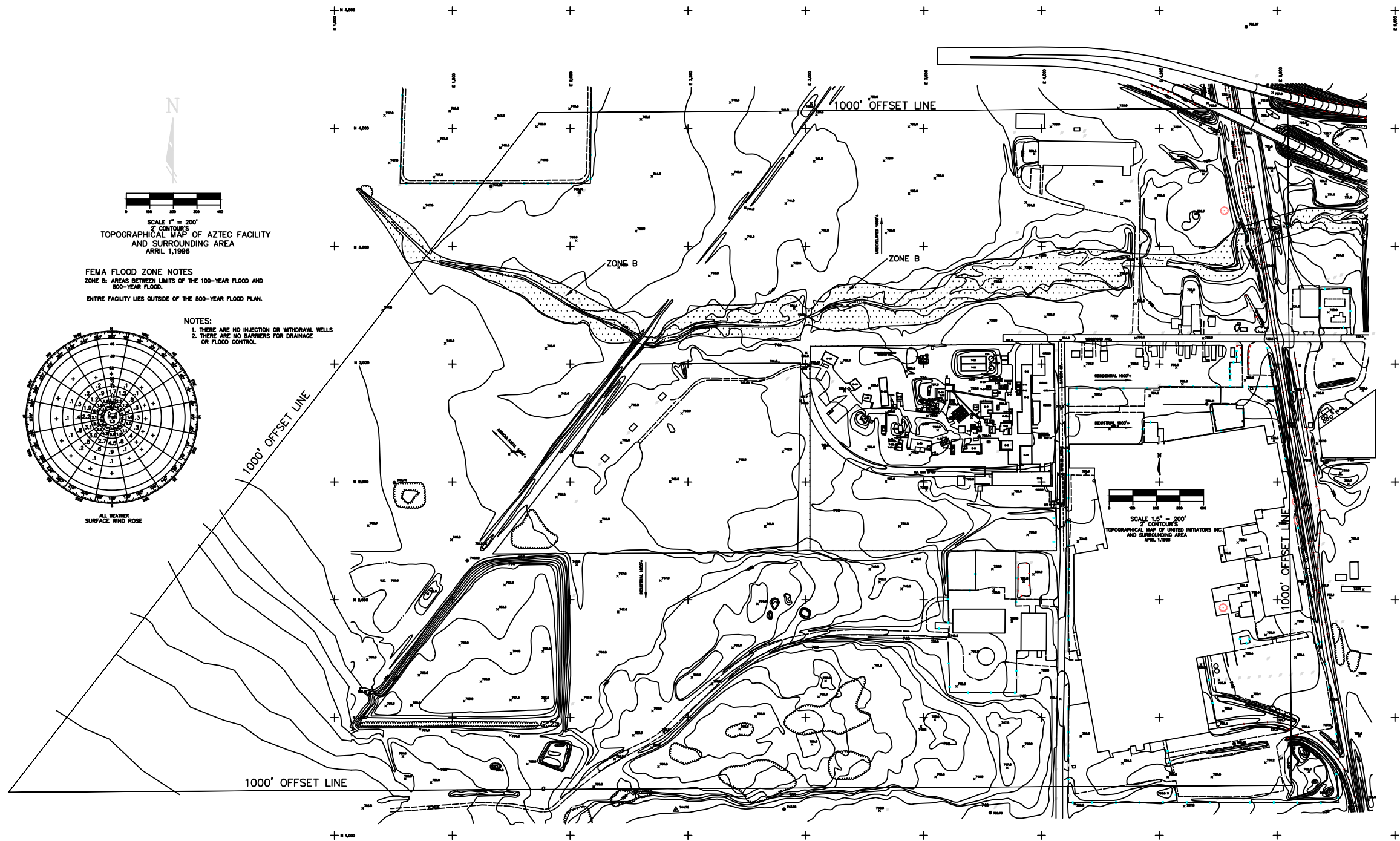
10. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment, and disposal areas; and sites of future storage, treatment, or disposal areas. See instructions for more detail.

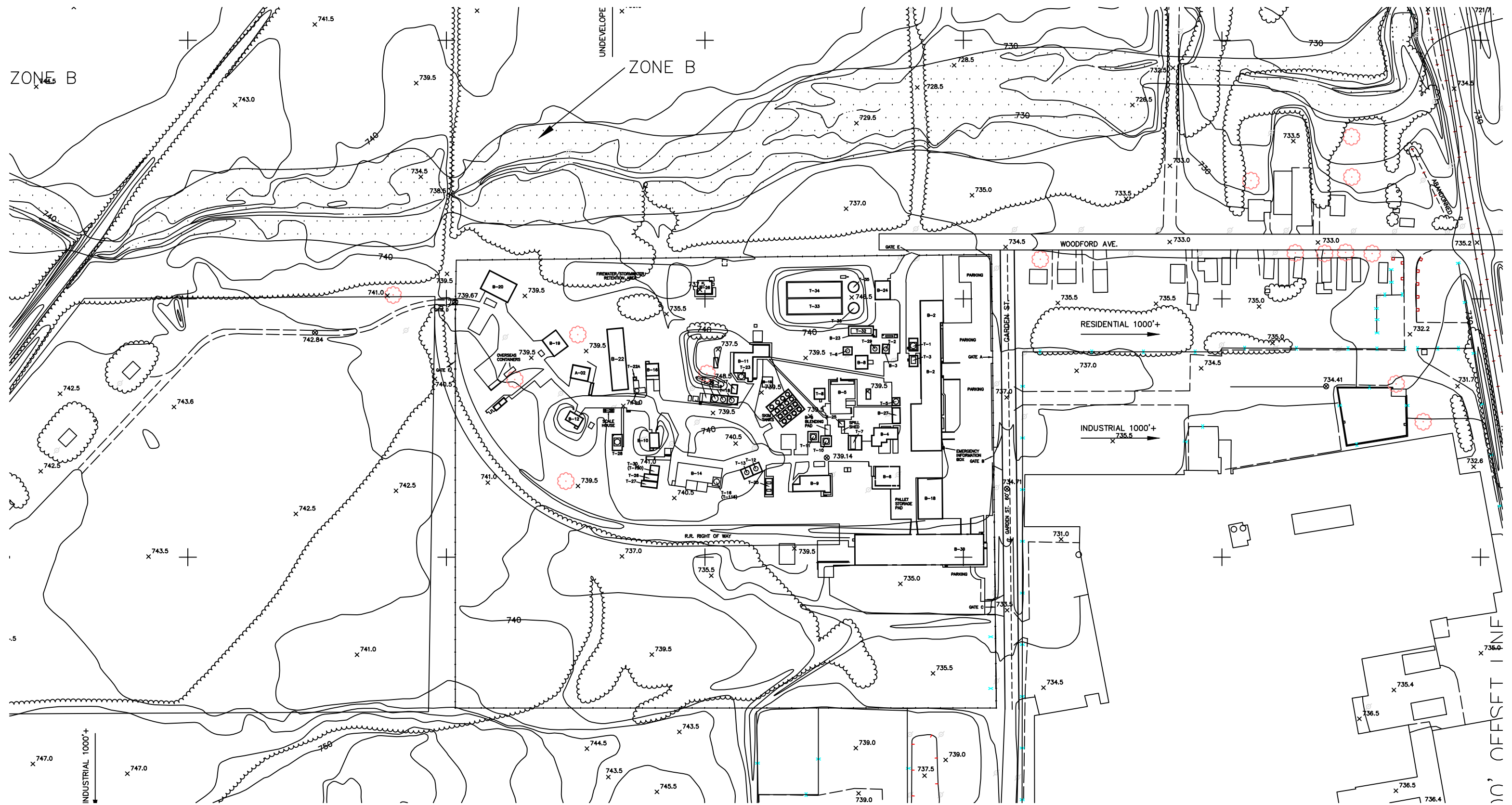
11. Comments


# **Topographical Map and Surrounding Area**



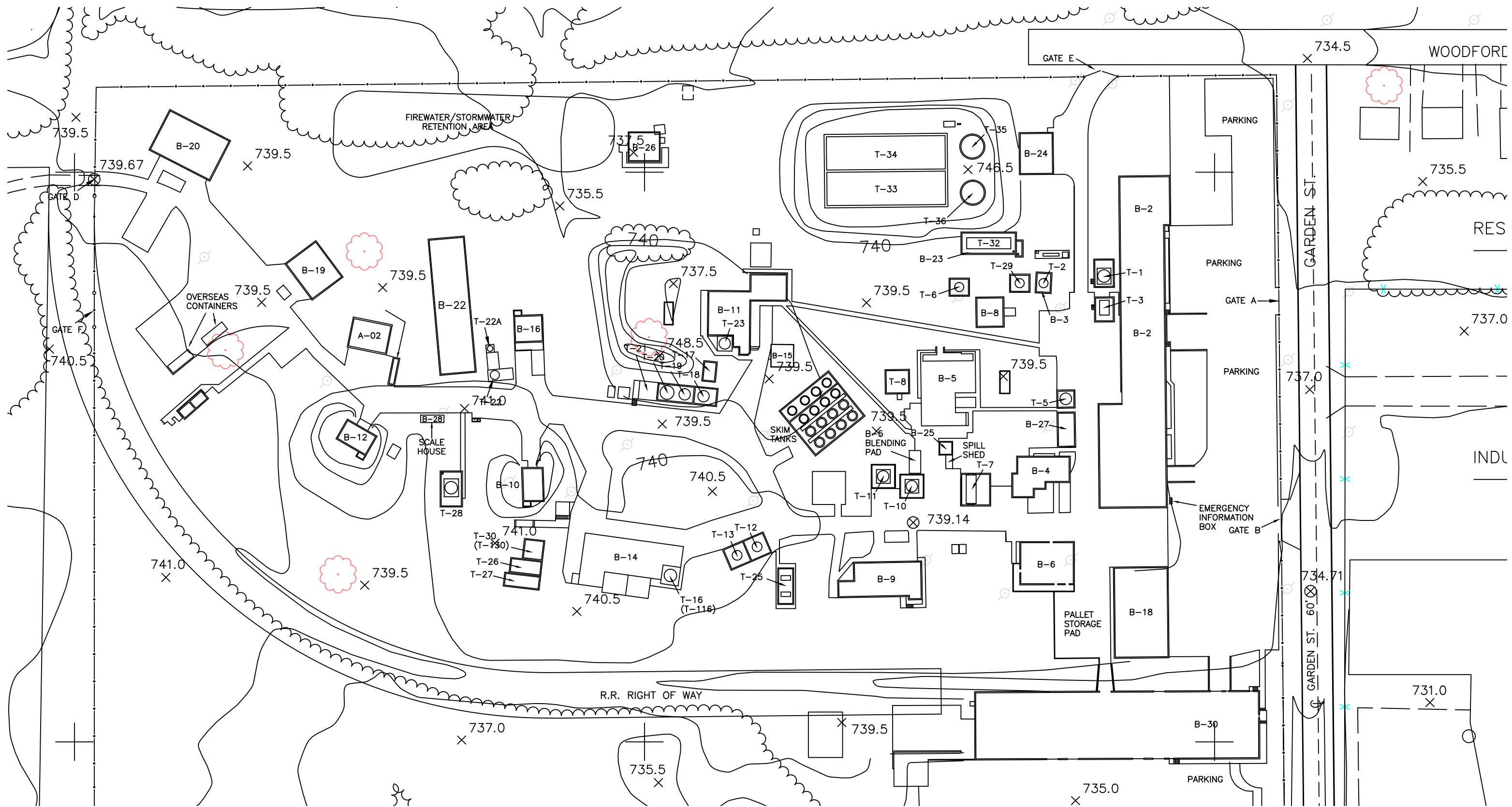


**Topographical Map**  
**Depicting Zone B**  
**Area within 100 Year Flood Zone**  
**North of Site Boundary**



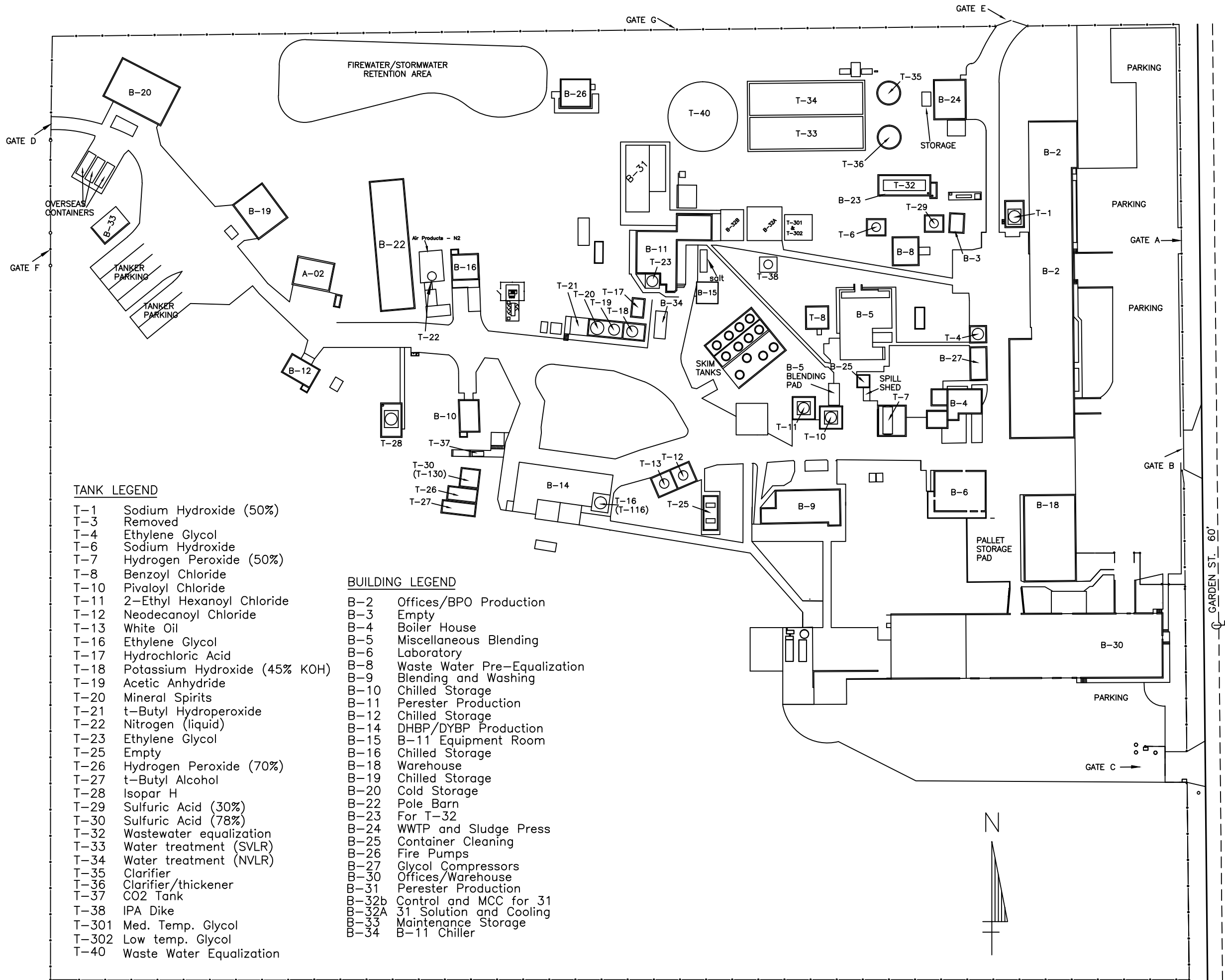
**Topographical Map**

**Active Site**



**Facility Map**  
**Site Plan-Building & Vessel**  
**Identification – Issue 13**





TANK LEGEND

T-1	Sodium Hydroxide (50%)
T-3	Removed
T-4	Ethylene Glycol
T-6	Sodium Hydroxide
T-7	Hydrogen Peroxide (50%)
T-8	Benzoyl Chloride
T-10	Pivaloyl Chloride
T-11	2-Ethyl Hexanoyl Chloride
T-12	Neodecanoyl Chloride
T-13	White Oil
T-16	Ethylene Glycol
T-17	Hydrochloric Acid
T-18	Potassium Hydroxide (45% KOH)
T-19	Acetic Anhydride
T-20	Mineral Spirits
T-21	t-Butyl Hydroperoxide
T-22	Nitrogen (liquid)
T-23	Ethylene Glycol
T-25	Empty
T-26	Hydrogen Peroxide (70%)
T-27	t-Butyl Alcohol
T-28	Isopar H
T-29	Sulfuric Acid (30%)
T-30	Sulfuric Acid (78%)
T-32	Wastewater equalization
T-33	Water treatment (SVLR)
T-34	Water treatment (NVLR)
T-35	Clarifier
T-36	Clarifier/thickener
T-37	CO2 Tank
T-38	IPA Dike
T-301	Med. Temp. Glycol
T-302	Low temp. Glycol
T-40	Waste Water Equalization

BUILDING LEGEND

B-2	Offices/BPO Production
B-3	Empty
B-4	Boiler House
B-5	Miscellaneous Blending
B-6	Laboratory
B-8	Waste Water Pre-Equalization
B-9	Blending and Washing
B-10	Chilled Storage
B-11	Perester Production
B-12	Chilled Storage
B-14	DHBP/DYBP Production
B-15	B-11 Equipment Room
B-16	Chilled Storage
B-18	Warehouse
B-19	Chilled Storage
B-20	Cold Storage
B-22	Pole Barn
B-23	For T-32
B-24	WWTP and Sludge Press
B-25	Container Cleaning
B-26	Fire Pumps
B-27	Glycol Compressors
B-30	Offices/Warehouse
B-31	Perester Production
B-32b	Control and MCC for 31
B-32A	31 Solution and Cooling
B-33	Maintenance Storage
B-34	B-11 Chiller

13	2/27/17	Removed Hazardous Waste Shed and Empty Drum Pad	JJK						
12	02/18/16	Modified Legends, added Gate G	JJK						
11	10/22/15	Added B-34 and modified T-12	JJK						
10	9/17/13	Modify Skim Tank & H2 Plant	MEM						
9	5/15/12	ADD COMP. FUEL & THOR PARKING	MEM						
8	12/17/10	REMOVED T3	DMW						
7	12/23/09	REMOVED TRUCK SCALE/SHORT. HAZ. STOR.	DMW						
6	4/22/09	T38 ADDITION	DMW						
5	5/6/05	B-31 Addition	RDK						
4	9/11/02								
3	8/9/01								
2	2/11/98								
1	10/23/97	FOR ISSUE							
ISS	DATE	DESCRIPTION OF REVISION	BY	CHK'D	BY	CHK'D	APP'D	DRAFTING	ENGINEERING DESIGN

THIS DRAWING HAS BEEN PRODUCED USING C.A.D. AND MUST NOT BE ALTERED MANUALLY AND IS SUPPLIED ON THE BASIS THAT IT MAY ONLY BE USED, REPRODUCED OR OTHERWISE ADAPTED FOR USE IN ACCORDANCE WITH THE EXPRESS PERMISSION IN WRITING FROM UNITED INITIATORS INC.

UNITED INITIATORS INC

LOCATION 555 GARDEN ST.  
ELYRIA, OHIO 44035

TITLE  
United Initiators Inc  
SITE PLAN - BUILDING & VESSEL  
IDENTIFICATION

PROJECT No.	c:\drawings\site\plot\plot-001.dwg	
SCALE	DRAWING NUMBER	ISSUE
	PLOT-001	13

## **Boiler 2 and Boiler Feed Tank Photos**





Hazardous Waste Fuels Boiler in Building B-4 (Boiler House)



Waste feed working tank area in Building B-4 (Boiler House), viewed from the south.

## **SECTION B**

### **FACILITY DESCRIPTION**

This information is submitted to meet the requirements of OAC 3745-54-31.

#### **B-1 GENERAL DESCRIPTION (OAC 3745-50-44(A)(1))**

United Initiators, Inc. is located within the city limits of Elyria, Ohio. This facility is a manufacturer of organic peroxides in solid and liquid form. These materials can possess several hazardous characteristics, including flammability and reactivity. Hazardous waste byproducts are created during the production of these materials primarily from purification processes and from cleaning of production tanks and lines between product runs.

The facility street address and mailing address are both:

United Initiators, Inc.  
555 Garden Street  
Elyria, Ohio 44035

#### **B - 2 TOPOGRAPHIC MAP (OAC 3745-50-44(A)(19))**

Appendix B-1 includes four USGS topographical maps, which combine to identify the area within 1-mile of the United Initiators property boundary, the location of the hazardous waste treatment unit, surface water bodies on the property, and drinking water wells within the vicinity of the property. There are no water intake or discharge structures or underground injection operations on the United Initiators property, nor within ¼ mile of the property.

Appendix B-2 contains a facility map that shows the location of the permitted hazardous waste management operations at the United Initiators facility on a topographic map with 2-foot elevation contours and with a scale of 1-inch equal to no more than 200 feet. This map also includes the surrounding area within 1,000-feet of the hazardous waste operations.

#### **B - 2a FACILITY MAPS**

Details of the United Initiators, Inc. facility can be found in Appendix B-2. Appendix B-3 is an aerial photograph of the facility, showing the facility layout as of 2015. Appendix B-4 is a zoning map of the facility and the surrounding area.

## B - 2b WEATHER INFORMATION

The general prevailing winds are from the southwest, with the predominant wind speeds ranging between 2.1 m/s and 5.7 m/s, although wind speeds up to 10.8 m/s are not uncommon. Appendix B-5 includes a wind rose, generated from one-year meteorological data collected at Cleveland Hopkins International Airport, which is located approximately 15 miles east of the United Initiators, Inc. facility. This wind rose was obtained from Ohio EPA.

## B - 3 LOCATION INFORMATION

### B - 3a Seismic Standard (OAC 3745-54-18(A))

United Initiators is located in Lorain County, Ohio. Because the political jurisdiction of Lorain County is not listed in 40 CFR 264 Appendix VI, the United Initiators facility is not required to further demonstrate compliance with the seismic considerations of OAC 3745-54-18(A) and 40 CFR 264.18(a).

### B - 3b Floodplain Standard (OAC 3745-54-18(B))

The area containing the United Initiators facility is depicted across two Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (National Flood Insurance Program). Both maps are dated August 19, 2008. The east portion of the facility can be found on Map Number 39093C0226D, while the west portion of the facility can be found on Map Number 39093C0207D. The entire facility lies outside of the 100-year flood plain and is therefore not subject to the additional 100-year floodplain standards of OAC 3745-54-18(B). See Appendix B-6 for flood insurance map details.

## B - 4 TRAFFIC PATTERNS (OAC 3745-54-31)

The United Initiators, Inc. facility is located at the corner of Garden Street and Woodford Avenue. All regular access into and out of the facility is via three vehicle gates along Garden Street, which are the primary means of site access and remain open during plant operating hours. There are also two vehicle gates and one man gate along the north side of the property, and a gate along the west end of the property, which lead to an inactive portion of the property but not to a public roadway. The gates on the north and west fence lines remain closed and locked when not in use.

The United Initiators facility can be accessed from the south via West River Road, from the east via Woodford Avenue and Garden Street, or from the north via Gateway Boulevard, Woodford Avenue and Garden Street. An alternate access from the south is available through the Westway Gardens

subdivision and Garden Street. All trucks are advised to use the north route (Woodford Avenue) when approaching and leaving the facility.

The onsite traffic pattern is given in Appendix B-2. All roads within the plant allow for two-way traffic. Parking lots within the site allow for two-way traffic. All cars are restricted to the parking lots. Box trailers are generally restricted to the parking lot or loading areas. Tanker trucks can be found in the parking lots and within the plant. The primary method of transporting materials onsite is via propane powered forklifts.

#### B - 4a Traffic Control

Traffic is controlled by limiting access to the plant production area. Gate B is used for tankers and smaller vehicles, while Gate C is used for box trailers. Only vehicles that are unloading or loading materials or are involved in construction or maintenance activities are allowed access to the plant production areas. All vehicles are given directions to their loading/unloading area and are escorted. Passenger vehicles are not allowed within the plant, other than in designated parking lots. The primary passenger vehicle parking lot is accessed through Gate A.

Three way stop signs are located at the only onsite intersection.

Traffic volume depends on day-to-day shipping and receiving activities. Approximately 10-20 tank trailers per week are allowed into the production area for shipping and receiving activities. This will vary based on the current production level. Approximately 10 to 15 box trailers are received at Gate C each week, but these generally do not enter the production areas of the plant. Hazardous wastes are not received at the facility, and outgoing hazardous waste truck traffic is generally less than one shipment per month, via box trailer.

#### B - 4b Access Road Construction

Roads within the facility are constructed of eight inch concrete reinforced with highway mesh. The primary roadways also have one and one-half inches of asphalt on top of this concrete. The roads have been designed to handle any vehicle that can travel on public highways. It is estimated that the facility's roadways can handle vehicles of 100,000 lbs. gross weight.

Page B-4 Reserved.

## **Appendix B-1**

### **Topographic Maps**

**Grafton, OH 2013**

**Avon, OH 2013**

**Lorain, OH 2013**

**Oberlin, OH 2013**

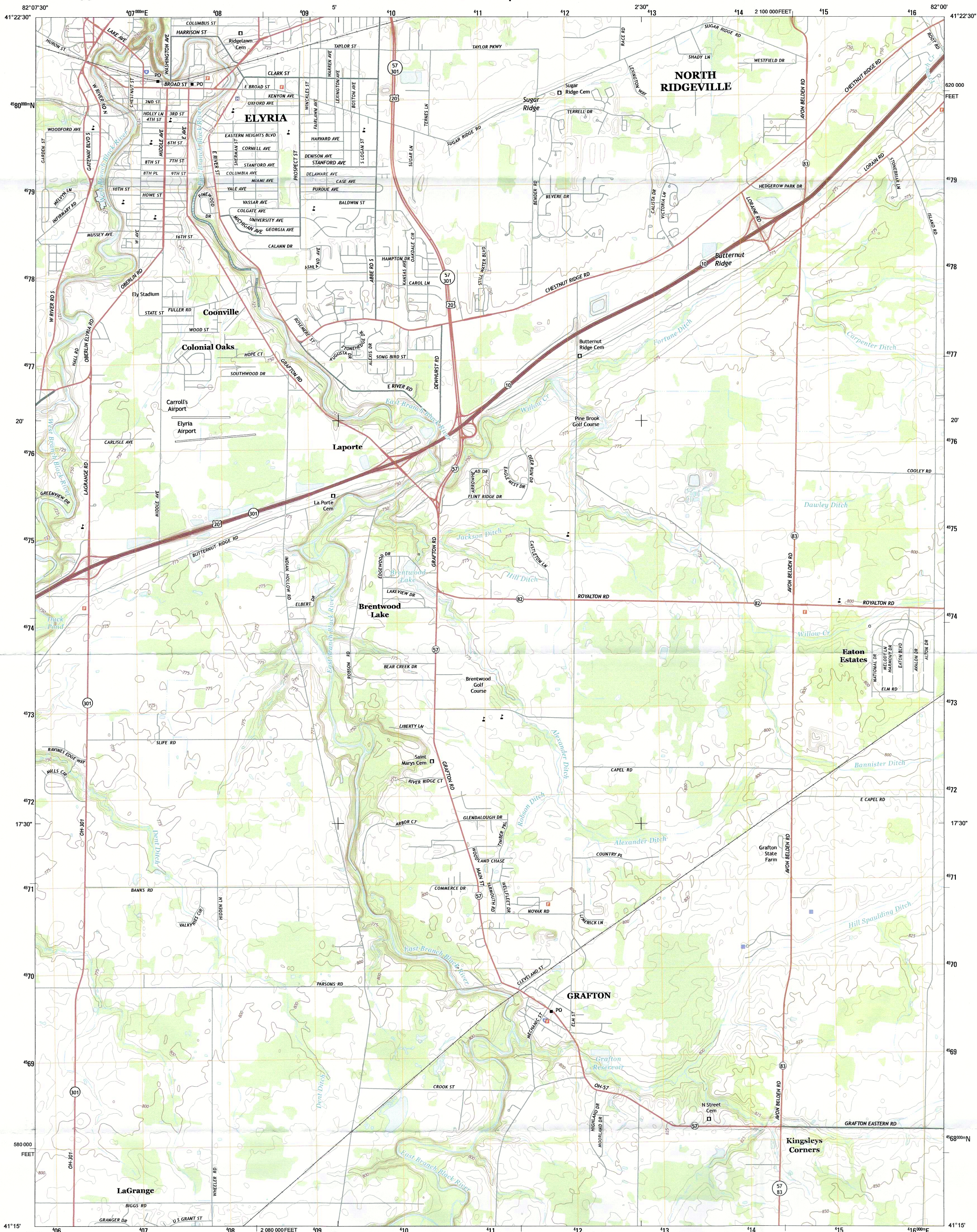




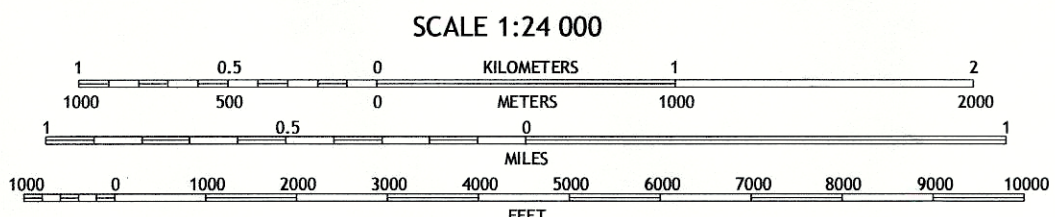
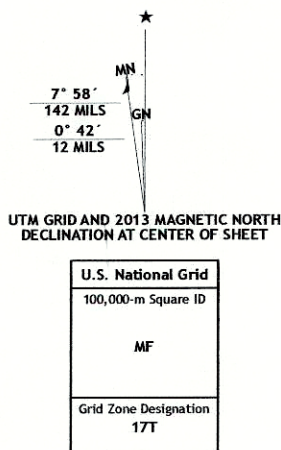
U.S. DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY



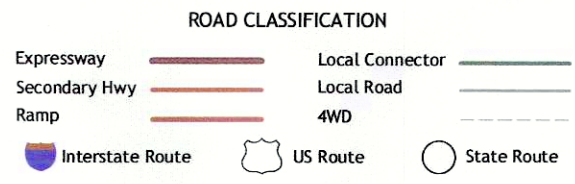
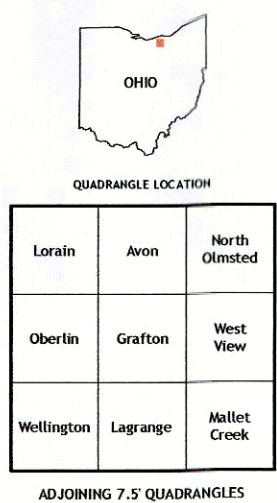
GRAFTON QUADRANGLE  
OHIO-LORAIN CO.  
7.5-MINUTE SERIES



Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84) Projection and  
1000-meter grid: Universal Transverse Mercator, Zone 17T  
10 000-foot ticks: Ohio Coordinate System of 1983 (north zone)  
This map is not a legal document. Boundaries may be  
generalized for this map scale. Private lands within government  
reservations may not be shown. Obtain permission before  
entering private lands.  
Imagery:.....NAIP, August 2011 - September 2011  
Roads:.....62006-2013 TomTom  
Names:.....National Hydrography Dataset, 2011  
Hydrography:.....National Elevation Dataset, 2010  
Contours:.....Census, BWC, IBC, USGS, 1972 - 2012  
Public Land Survey System:.....BLM, 2013



CONTOUR INTERVAL 5 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988  
This map was produced to conform with the  
National Geospatial Program US Topo Product Standard, 2011.  
A metadata file associated with this product is draft version 0.6.15



GRAFTON, OH  
2013



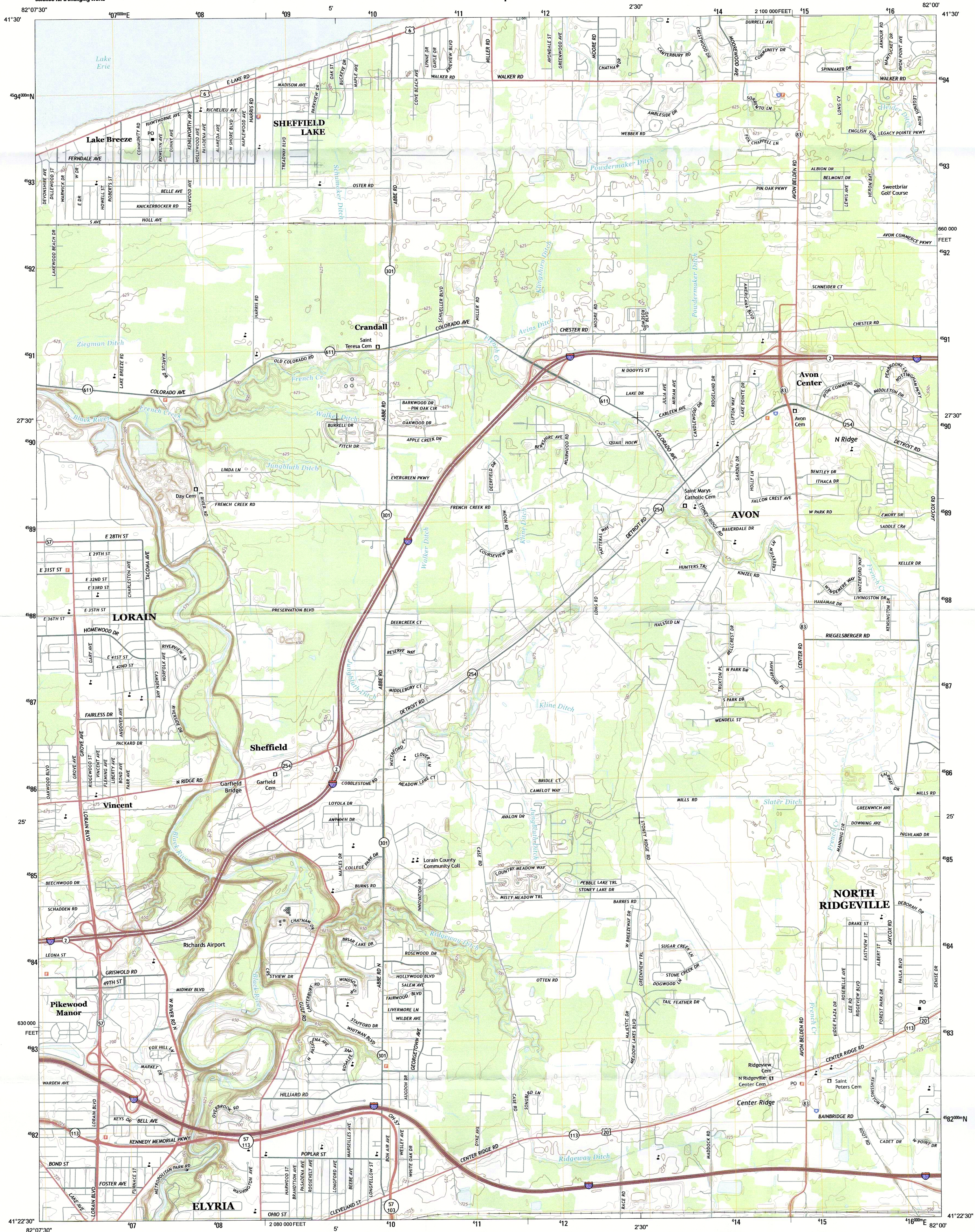




U.S. DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY

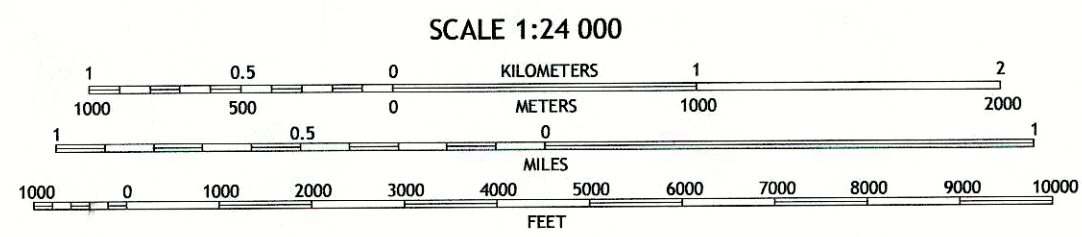
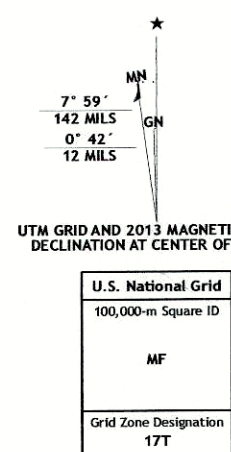


AVON QUADRANGLE  
OHIO-LORAIN CO.  
7.5-MINUTE SERIES



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World Geodetic System of 1984 (WGS84). Projection and  
1000-meter grid: Universal Transverse Mercator, Zone 17T  
10 000-foot ticks: Ohio Coordinate System of 1983 (north zone)  
This map is not a legal document. Boundaries may be  
generalized for this map scale. Private lands within government  
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Public Land Survey System:.....BLM, 2013



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NORTH AMERICAN VERTICAL DATUM OF 1988  
This map was produced to conform with the  
National Geospatial Program US Topo Product Standard, 2011.  
A metadata file associated with this product is draft version 0.6.15



Avon	North
Lorain	Avon
Obertin	Grafton
	West
	View

ROAD CLASSIFICATION  
Expressway  
Secondary Hwy  
Ramp  
Interstate Route  
Local Connector  
Local Road  
4WD  
US Route  
State Route

AVON, OH  
2013







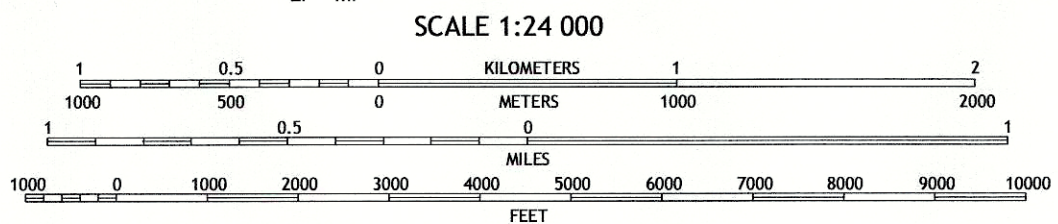
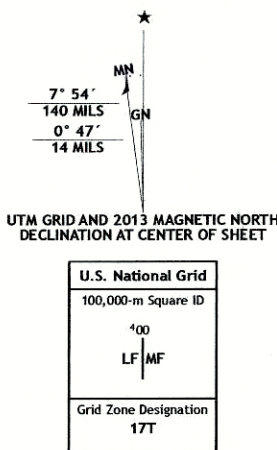
U.S. DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY



LORAIN QUADRANGLE  
OHIO-LORAIN CO.  
7.5-MINUTE SERIES



Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84). Projection and  
1000-meter grid: Universal Transverse Mercator, Zone 17T  
10 000-foot ticks: Ohio Coordinate System of 1983 (north zone)  
This map is not a legal document. Boundaries may be  
generalized for this map scale. Private lands within government  
reservations may not be shown. Obtain permission before  
entering private lands.  
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Public Land Survey System.....BLM, 2013



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This map was produced to conform with the  
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A metadata file associated with this product is draft version 0.6.15



Vermilion	Lorain	Amn
Ripton	Oberlin	Grafton

ROAD CLASSIFICATION  
Expressway  
Secondary Hwy  
Ramp  
Interstate Route  
Local Connector  
Local Road  
4WD  
US Route  
State Route

LORAIN, OH  
2013



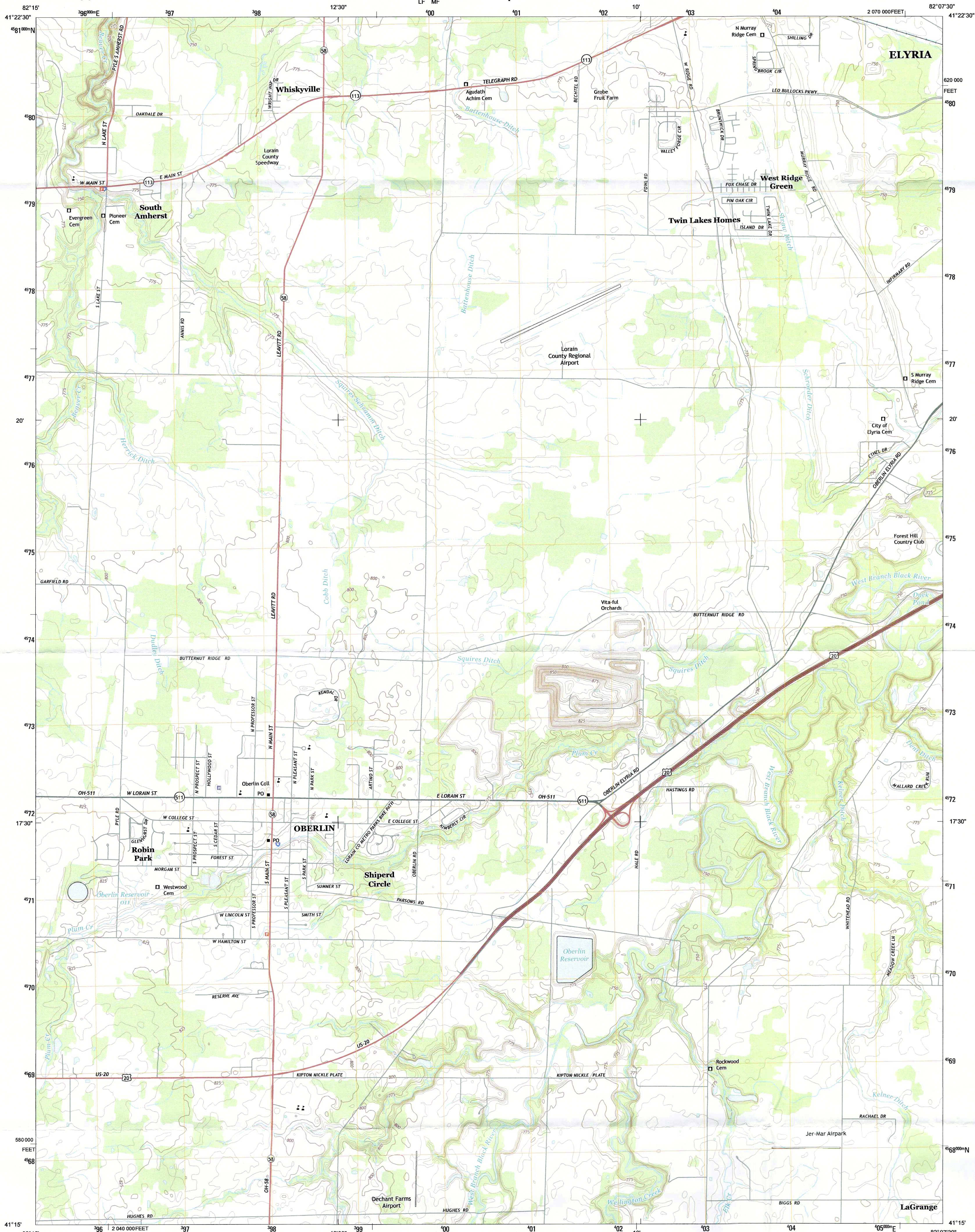




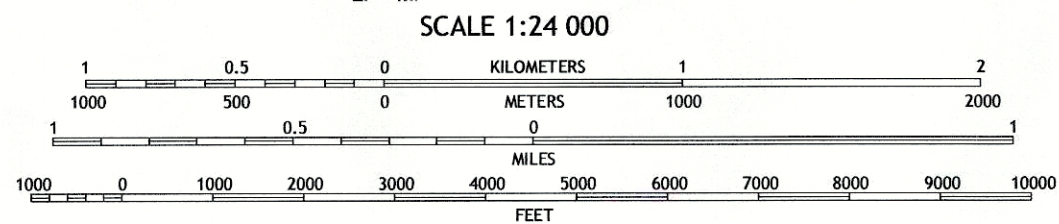
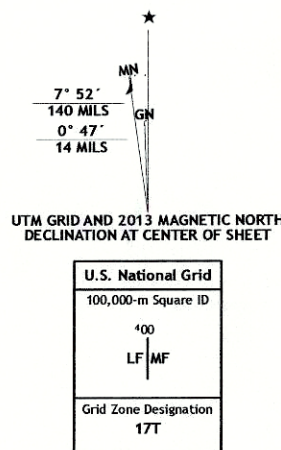
U.S. DEPARTMENT OF THE INTERIOR  
U. S. GEOLOGICAL SURVEY



OBERLIN QUADRANGLE  
OHIO-LORAIN CO.  
7.5-MINUTE SERIES



Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84) Projection and  
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10 000-foot ticks: Ohio Coordinate System of 1983 (north zone)  
  
This map is not a legal document. Boundaries may be  
generalized for this map scale. Private lands within government  
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entering private lands.  
  
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Boundaries.....Census, IBW, USGS, 1972-2012  
Public Land Survey System.....BLM, 2013



CONTOUR INTERVAL 5 FEET  
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This map was produced to conform with the  
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A metadata file associated with this product is draft version 0.6.15



Veration	Lorain	Avon
Kipton	Oberlin	Griffin
Brighton	Wellington	Lapange

ADJOINING 7.5' QUADRANGLES

ROAD CLASSIFICATION  
Expressway  
Secondary Hwy  
Ramp  
Interstate Route  
Local Connector  
Local Road  
4WD  
US Route  
State Route

OBERLIN, OH  
2013

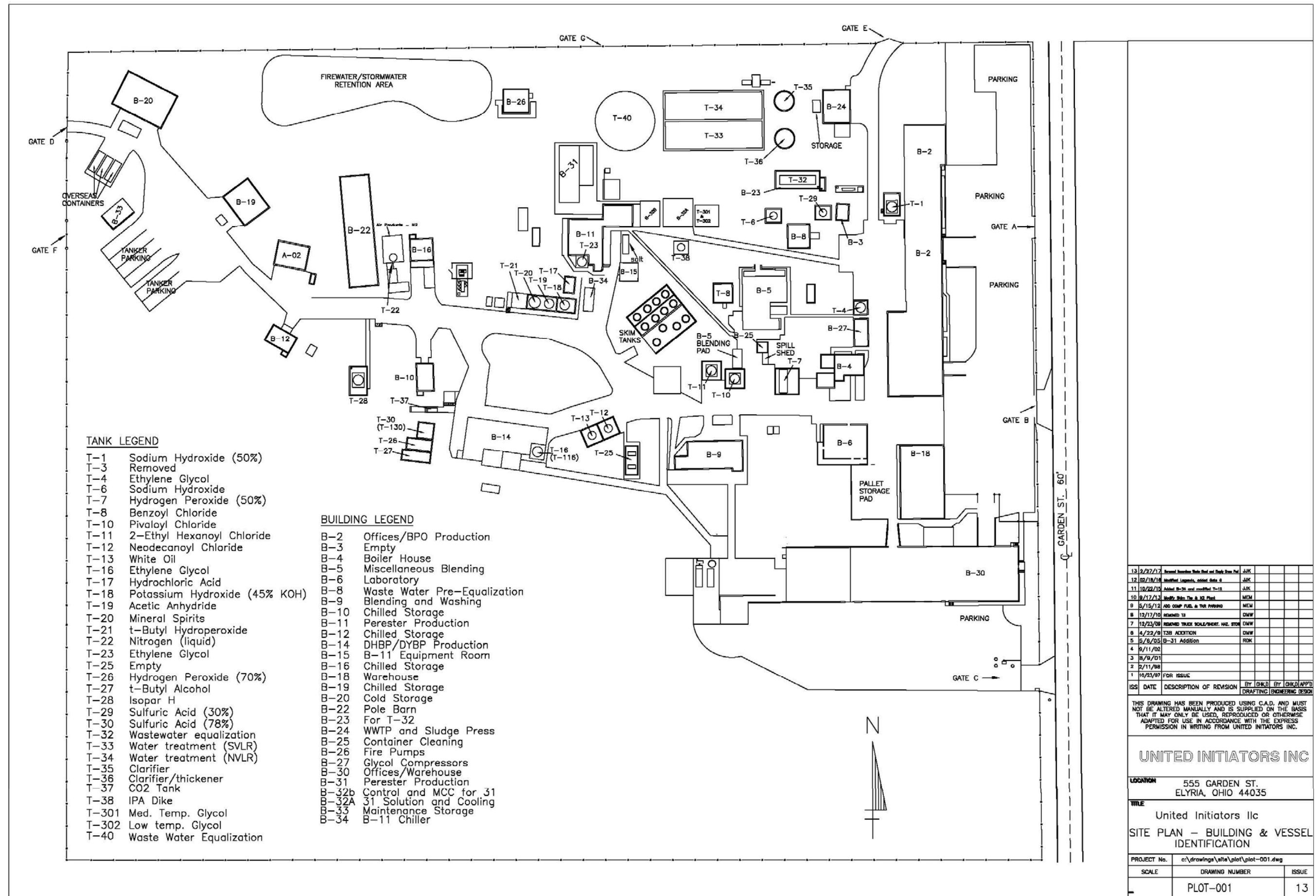




## **Appendix B-2**

### **Facility Map**

#### **Site Plan-Building & Vessel Identification – Issue 13**



## **Appendix B-3**

### **Aerial Photograph**

**Imagery Date – 10/25/2015**



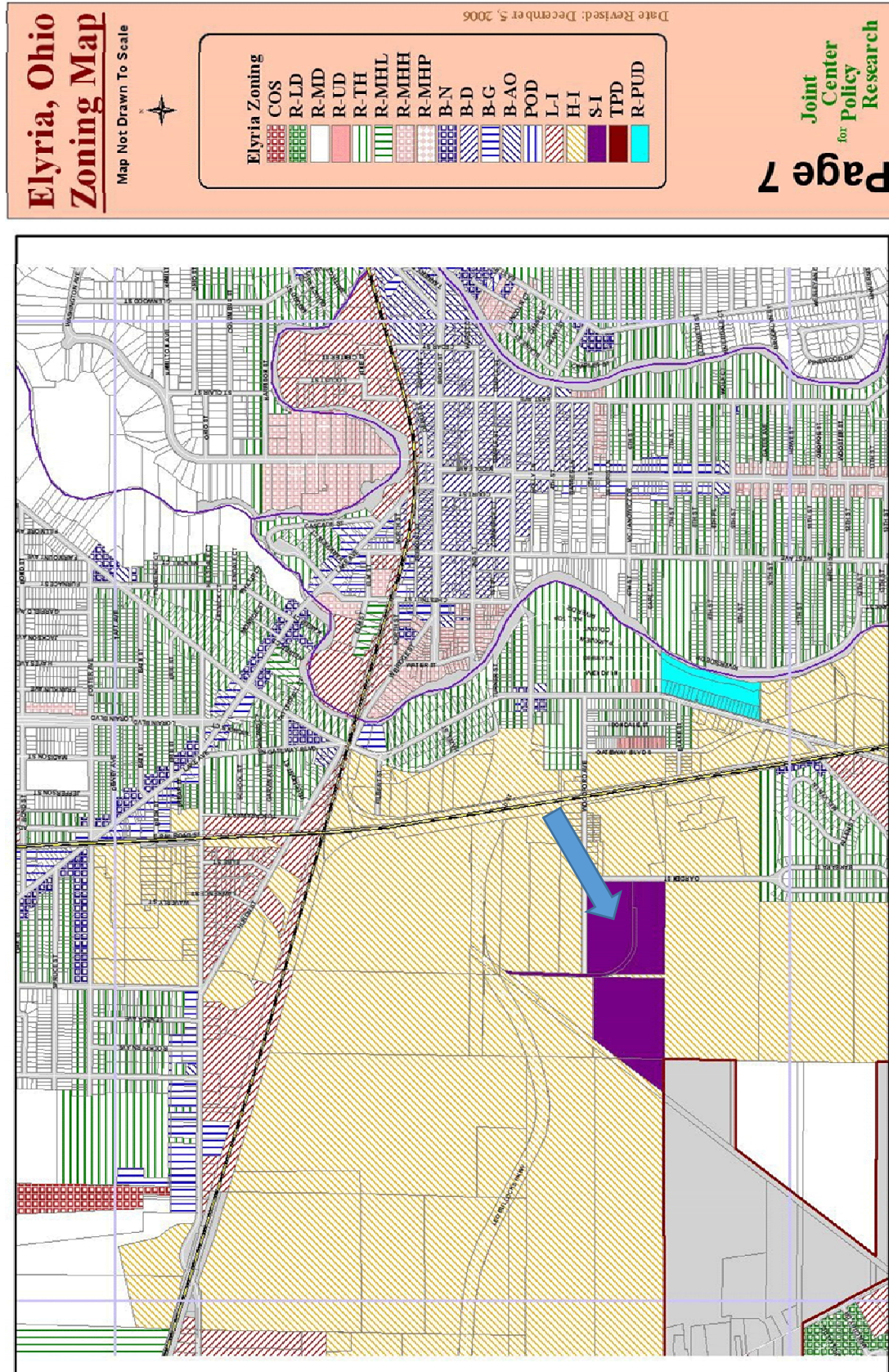




## **Appendix B-4**

### **Zoning Map**

**Revision Date: 12/5/2006**



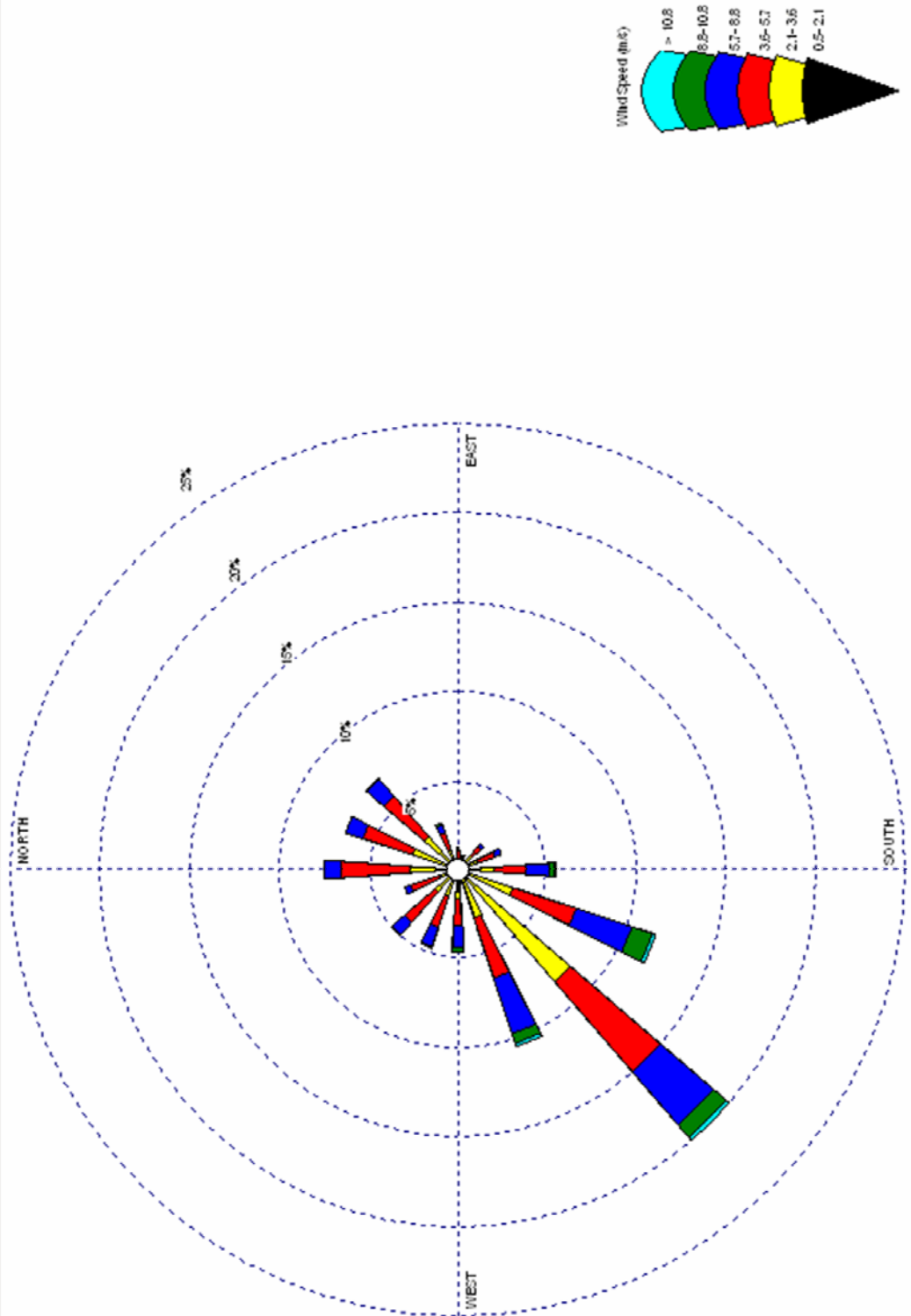
"S-I" zoning = "Special Industrial"



## **Appendix B-5**

### **Wind Rose**

Station #14820 - CLEVELAND/HOPKINS INT'L ARPT, OH - January 1 - December 31



This wind rose was obtained from the Ohio EPA at  
[http://www.epa.state.oh.us/portals/27/SIP/Nonattain/E1-Meteorology\\_wind\\_roses.pdf](http://www.epa.state.oh.us/portals/27/SIP/Nonattain/E1-Meteorology_wind_roses.pdf)

## **Appendix B-6**

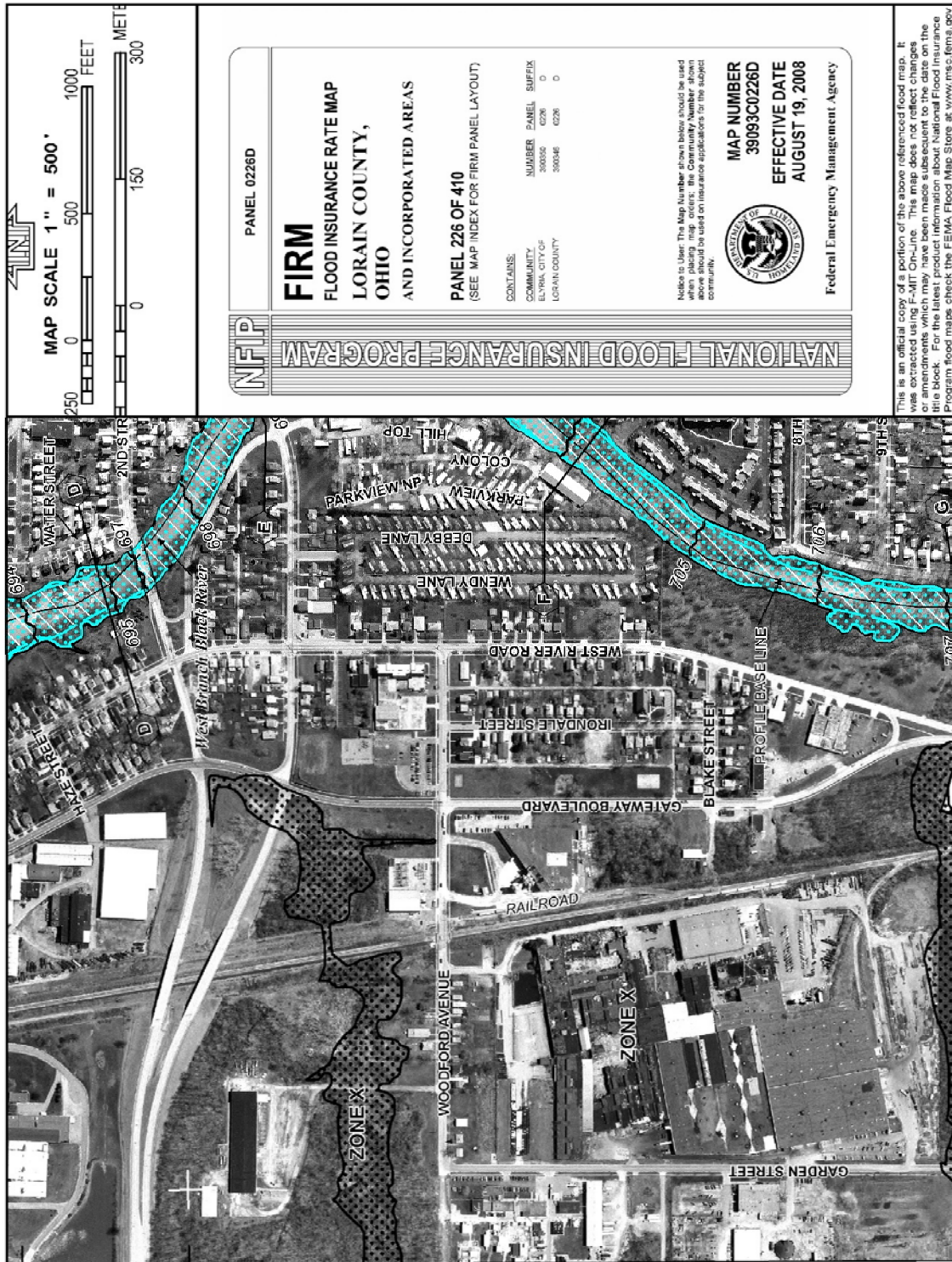
### **Flood Insurance Map**

**Panel 207 – Effective Date 8/19/2008**

**Panel 226 – Effective Date 8/19/2008**

**Legend – Effective Date 6/18/2010**







## LEGEND



### SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

<b>ZONE A</b>	No Base Flood Elevations determined.
<b>ZONE AE</b>	Base Flood Elevations determined.
<b>ZONE AH</b>	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
<b>ZONE AO</b>	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
<b>ZONE AR</b>	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
<b>ZONE A99</b>	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
<b>ZONE V</b>	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
<b>ZONE VE</b>	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.



### FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.



### OTHER FLOOD AREAS

<b>ZONE X</b>	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
---------------	---



### OTHER AREAS

<b>ZONE X</b>	Areas determined to be outside the 0.2% annual chance floodplain.
<b>ZONE D</b>	Areas in which flood hazards are undetermined, but possible.



### COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS



### OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
	Base Flood Elevation line and value; elevation in feet*
	Base Flood Elevation value where uniform within zone; elevation in feet*

\* Referenced to the North American Vertical Datum of 1988

	Cross section line
	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
2476000N	1000-meter Universal Transverse Mercator grid values, zone 18
600000 FT	5000-foot grid values: Connecticut State Plane coordinate system (FIPZONE 0600), Lambert Conformal Conic projection
DX5510 x	Bench mark (see explanation in Notes to Users section of this FIRM panel)
● M1.5	River Mile

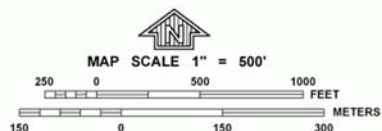
MAP REPOSITORY  
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE  
FLOOD INSURANCE RATE MAP  
June 18, 2010

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.



## SECTION C

### WASTE CHARACTERISTICS

This information is submitted to demonstrate compliance with the requirements of OAC 3745-50-44(A)(2) and (3).

This section describes the chemical and physical nature of the hazardous wastes generated and treated at the United Initiators, Inc. facility, and includes the site's Waste Analysis Plan for sampling and testing of hazardous wastes. United Initiators generates wastes that are managed in satellite accumulation and Large Quantity Generator (LQG) accumulation areas. These streams may include discarded laboratory chemicals, off-specification raw materials, off-specification products, and small amounts of spill residues. The only hazardous wastes handled in a permitted hazardous waste unit (i.e., treated in Boiler 2 located in Building B-4,) are the organic peroxide wastes generated on-site which are discussed in detail below.

This plan is designed to provide information on wastes to ensure their safe handling and management. All waste will be evaluated to determine if it is restricted by OAC 3745-270. No waste is landfilled onsite.

The following information is submitted to meet the requirements of OAC 3745-54-13.

#### C-1 CHEMICAL AND PHYSICAL ANALYSIS (OAC 3745-54-13, 3745-57-40)

The characteristics of wastes from the production operations are well-defined and consistent. The hazardous waste streams that are treated in Boiler 2 consist of organic peroxides captured from skim tanks that are part of the wastewater treatment system or off-spec manufactured materials that only include those constituents listed in Table C-1 of Waste Analysis Plan. These peroxides are less dense than water. Process wastewaters flow from the production units into collection tanks, which lead to a series of skim tanks in the facility's wastewater treatment system. The only flow through the skim tanks is wastewater from the production of the compounds listed below. No compounds other than organic peroxides are manufactured in the process buildings.

In the wastewater treatment system, the organic peroxides gravity separate from the process wastewater, accumulate on the surface of the skim tanks, and are removed for combustion as hazardous waste fuel in Boiler 2. The treated process wastewaters are discharged from the wastewater treatment

plant to the City of Elyria Waste Water Treatment Plant under the City of Elyria Industrial Wastewater Discharge Permit.

United Initiators manufactures organic peroxides in accordance with customer requirements. Production occurs in buildings B-2 (BPO), B-11 (Perester), B-5 (Blending), B-14 (DHBP/DYBP), and B-31 (Perester). All of the organic peroxides manufactured at the facility are mutually compatible, and therefore all production wastewaters are managed in a single wastewater processing system. Any combination of the compounds listed in Table C-1 may be found in the skimmed hazardous waste stream, with relative concentrations variable over time, depending upon customer requirements and production schedules. Please refer to the facility map in Appendix B-2 for site layout.

**Table C-1**

<b>Compound</b>	<b>Formula</b>	<b>CAS Number</b>
tert-Amyl hydroperoxide	(C <sub>5</sub> H <sub>12</sub> O <sub>2</sub> )	3425-61-4
tert-Amyl peroxy-2-ethylhexanoate	(C <sub>13</sub> H <sub>26</sub> O <sub>3</sub> )	686-31-7
tert-Amyl peroxybenzoate	(C <sub>12</sub> H <sub>16</sub> O <sub>3</sub> )	4511-39-1
tert-Amyl peroxyneodecanoate	(C <sub>15</sub> H <sub>30</sub> O <sub>3</sub> )	68299-16-1
tert-Amyl peroxy-pivalate	(C <sub>10</sub> H <sub>20</sub> O <sub>3</sub> )	29240-17-3
tert-Butyl hydroperoxide	(C <sub>4</sub> H <sub>10</sub> O <sub>2</sub> )	75-91-2
tert-Butyl peroxy-2-ethylhexanoate	(C <sub>12</sub> H <sub>24</sub> O <sub>3</sub> )	3006-82-4
tert-Butyl peroxyacetate	(C <sub>6</sub> H <sub>12</sub> O <sub>3</sub> )	107-71-1
tert-Butyl peroxybenzoate	(C <sub>11</sub> H <sub>14</sub> O <sub>3</sub> )	614-45-9
tert-Butyl peroxyneodecanoate	(C <sub>14</sub> H <sub>28</sub> O <sub>3</sub> )	26748-41-4
tert-Butyl peroxy-pivalate	(C <sub>9</sub> H <sub>18</sub> O <sub>3</sub> )	927-07-1
2,5-Dimethyl-2,5-Di(tert-butylperoxy)hexane	(C <sub>16</sub> H <sub>34</sub> O <sub>4</sub> )	78-63-7
2,5-Dimethyl-2,5-Di(tert-butylperoxy)hexyne-3	(C <sub>16</sub> H <sub>30</sub> O <sub>4</sub> )	1068-27-5

Each of the compounds listed in Table C-1 meets the definition of a Class 5, Division 5.2 Organic Peroxide as specified at 49 CFR 173.128, and is also included in the Organic Peroxide Table listed in 49 CFR 173.225 (packaging requirements and other provisions for organic peroxides). The compounds are defined as organic peroxides because they contain oxygen (O) in the bivalent -O-O- (contains one or more oxygen - oxygen bonds) and are considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radical structures.

The organic peroxide wastes managed at the United Initiators, Inc. facility are reactive (D003) wastes as defined at OAC 3475-51-23(A)(6): when heated under confinement they are capable of explosive reaction. The wastes are also ignitable (D001) wastes with flash point at or below 140° F.

The physical characteristics of the hazardous wastes removed from the skim tanks are as follows:



1. They are always liquid;
2. They have a specific gravity of <1.0.

There are no waste residues generated during use of the organic peroxide wastes as fuel in Boiler 2. Because there are no residuals requiring land disposal, there is no regulatory requirement to evaluate the waste stream for underlying hazardous constituents. However, previous analyses of the skim tank wastes have shown that none of the hazardous constituents listed in the appendix to OAC 3745-51-11 are present in the waste stream.

## C - 2 WASTE ANALYSIS PLAN (OAC 3745-54-13)

### C - 2a Parameters and Rationale

The only hazardous wastes treated in Boiler 2 are organic peroxides generated on-site. Hazardous wastes that may be generated on-site (e.g., skim tank waste, unused raw materials, laboratory wastes, off-spec products) are managed in accordance with the LQG requirements prior to treatment in Boiler 2 or shipped offsite to a permitted treatment, storage, and disposal facility (TSD facility).

Wastes Managed Off-Site. All hazardous wastes that are not treated on-site in Boiler 2 are stored in LQG accumulation areas for up to 90 days and then shipped off-site to a permitted hazardous waste treatment, storage, and disposal facility. Parameters for testing any hazardous waste generated at the facility are decided on a case-by-case basis. The facility will work with the receiving TSD facility to determine what testing is necessary in order to fully characterize any wastes. If an organic peroxide product is determined to be unusable (off-spec) and must be discarded, then it is identified through generator knowledge as a reactive (D003) and ignitable (D001) hazardous waste. If a raw material is determined to be unusable, then the SDS and the supplier of the material will be consulted to help identify the correct waste classification. United Initiators, Inc., evaluates each hazardous waste upon generation to determine the applicability of the Land Disposal Restrictions of OAC 3745-270. A notice and certification as required in OAC 3745-270 is included with each shipment.

Wastes Managed On-Site. The remainder of this Waste Analysis Plan focuses on only the hazardous wastes treated in Boiler 2. The skim tank wastes and off-spec products are treated on-site via utilization as hazardous waste fuel in Boiler 2. Off-spec materials will only include those constituents listed in Table C-1 of Waste Analysis Plan. United Initiators, Inc., does not perform any other hazardous waste treatment on-site, and does not land dispose of any hazardous wastes on-site. Any wastes which cannot

be treated on-site are sent off-site to a permitted TSD facility. A notice and certification as required in OAC 3745-270 is included with each shipment.

Parameters for testing hazardous waste treated in Boiler 2 are decided by facility management and may include testing in accordance with SW-846, generator knowledge based on safety data sheets and production sheets, and other resources, as appropriate.

C - 2b Test Methods (OAC 3745-54-13(B)(2))

All wastes that contain organic peroxides are assumed, through knowledge of the processes generating the wastes, to be ignitable (D001) and reactive (D003) by regulatory definition under OAC 3745-51-21 & OAC 3745-51-23. Therefore, testing for ignitability and reactivity is not performed for wastes treated in Boiler 2. Testing for corrosivity is not performed based on generator knowledge and/or in-process pH meters that continuously monitor and confirm that the pH does not meet the regulatory definition of corrosivity.

United Initiators operates an on-site laboratory which has the capabilities to perform some analyses in accordance with SW-846 (Test Methods for Evaluating Solid Waste Physical/Chemical Methods). In addition to SW-846 the on-site laboratory routinely tests the active oxygen content of the skim tank wastes. United Initiators does not typically perform waste analyses on-site. If further testing of the waste streams were required, samples would be sent to an outside laboratory that is familiar with and certified in the particular method(s).

C - 2c Sampling Methods (OAC 3745-54-13(B)(3))

The skim tank wastes are a liquid. Samples are collected using a coliwasa, a weighted bottle, and a dipper to properly collect a sample, following ASTM Method D5495 (Standard Practice for Sampling with a Coliwasa).

The sampling devices, sample containers, sample preservation, sample holding times, number of samples, type of samples, sampling location, and quality assurance/quality control procedures will be as described in ASTM Method D5495.

C - 2d Frequency Of Analysis (OAC 3745-54-13(B)(4), 3745-57-41(B))

United Initiators utilizes generator process knowledge and thorough understanding of the products, process wastewaters, and skim tank materials to make the presumptive determination that all wastes

removed from the skim tanks will be ignitable (D001) and reactive (D003) and hazardous wastes. The processes that lead to the generation of these wastes do not change over time. This is confirmed by historical production procedures and production records that identify the constituents that have been used in the production processes.

C - 2e Additional Requirements For Waste Generated Off-site (OAC 3745-54-13(B)(5) and (C))

This facility only handles waste generated on-site. Requirements for wastes received from offsite generators do not apply.

C - 2f Additional Requirements For Ignitable, Reactive, Or Incompatible Wastes (OAC 3745-54-13(B)(6), 3745-54-17)

The skim tank waste and off-spec materials have the characteristics of ignitability (D001) and reactivity (D003). The skim tank waste and off-spec materials are treated in Boiler 2. Combustion (thermal treatment) breaks the organic peroxide wastes into carbon dioxide and water. No ash or residue remains.

All process wastes treated at the United Initiators facility are mutually compatible. No mixing of incompatible wastes are allowed at United Initiators, Inc.

Page C-6 Reserved.

## **SECTION D**

### **PROCESS INFORMATION**

The information provided in this section is submitted in accordance with the requirements of OAC 3745-50-43(A)(7) and 3745-55-70.

#### **D - 1 CONTAINERS (OAC 3745-55-70)**

United Initiators manages all containers of hazardous waste as a large quantity generator (LQG), as per OAC 3745-52-34. Hazardous wastes in containers accumulate for no more than 90 days prior to being treated in Boiler 2 or removed for off-site disposal. There are no hazardous waste container storage areas at the United Initiators facility that require permitting under OAC 3745-55-71.

Skim tank hazardous wastes are transferred from the wastewater treatment system into polyethylene totes for transfer via forklift to the Boiler 2 working feed tank (working tank). The facility utilizes totes to accumulate skim tank wastes. These totes are staged at the boiler building and emptied into the Boiler 2 working feed tank on an as needed basis (See working feed tank photo included in Part A). When wastes are not being transferred into the working tank, totes containing hazardous wastes are temporarily stored in a refrigerated less than 90 storage area located in B19/Building 19.

For hazardous wastes that are disposed off-site, the typical containers used by United Initiators for accumulation and shipment are 55-gallon drums (polyethylene drums or polyethylene-lined steel). Other sizes of containers may be used as appropriate. Steel overpack drums are available on-site for use as necessary.

All wastes managed at the United Initiators, Inc. facility are presumed to be D003 reactive and D001 ignitable materials unless otherwise specified. The less than 90 day accumulation areas for containers of reactive hazardous wastes are located at least fifteen meters (fifty feet) from the facility property line.

Previously permitted container storage areas were closed and have been removed from the facility's hazardous waste permit via a Class 1A permit modification, approved on October 22, 2008.

D - 2. TANKS (OAC 3745-55-90)

United Initiators does not operate any hazardous waste tanks that require RCRA permitting. The 300-gallon working tank is managed as a LQG accumulation tank under the hazardous waste generator regulations found at OAC-3745-52-34. United Initiators operates Boiler 2 with a maximum throughput of approximately 8 gallons/hour, for up to 24 hours/day. At full operation, the turnover frequency for the hazardous waste fuel working tank is less than 1.56 days, well within the 90-day LQG accumulation limit. Even at a very conservative 30% operation, the turnover frequency for the tank is approximately 5 days.

The following information regarding operation of this working tank is presented to provide full understanding of Boiler 2 operations.

The working tank is located within a secondary containment system that has total capacity of 1,122 gallons. A 300-gallon polyethylene tote, used to hold the mineral spirits used for purging the feed lines to the boiler, is also located within the secondary containment area. Both are elevated on carbon steel support stands.

The hazardous waste fuels generated at the United Initiators, Inc. facility consist of organic peroxides that have been collected from the wastewater treatment system's skim tanks. These wastes are transferred into the working tank from portable 300 gallon totes, which are used to transport skim tank wastes from the wastewater treatment plant to Boiler 2 for treatment. The contents of the totes are emptied one at a time into the working tank. It is impossible to connect more than one tote to the working tank simultaneously.

Skimmed wastes (hazardous waste fuel) are transferred into the working tank from a tote on the lift truck, positioned directly in front of the boiler building overhead door. With the overhead door open, the tote is raised on the forklift so that the tote bottom valve is slightly above the filling nozzle on the working tank. The tote is connected to the working tank via a transfer hose and the material gravity feeds into the working tank until the desired level is reached. A high level alarm on the working tank prevents overfilling. When transfer of wastes into the working tank is complete, the tote valve is closed and a breather valve opened, allowing the remaining material in the hose to drain into the working tank prior to disconnecting the transfer hose from the tote. The tote, if not empty, is returned to refrigerated storage.

The working tank is an agitated tank that is chilled to 50° F. If the temperature rises above the setpoint or the chiller fails to start, an alarm will sound. The chiller will automatically stop when

the level in the tank reaches the low low level at 2". Similarly, if the agitator on the working tank malfunctions an alarm will sound.

No liquid material other than that skimmed from the skim tanks will be placed in the working tank without approval from facility management. This will be documented through a variance system. Prior to combustion, the fuel is sampled and analyzed. Based on the analysis, the material is diluted with mineral spirits to approximately 2% active oxygen content.

D-3. SURFACE IMPOUNDMENTS (OAC 3745-56-20)

United Initiators, Inc. does not operate any hazardous waste surface impoundments at the Elyria, Ohio facility.

D-4. WASTE PILES (OAC 3745-56-50)

United Initiators, Inc. does not operate any hazardous waste piles at the Elyria, Ohio facility.

D-5. LAND TREATMENT (OAC 3745-56-70)

United Initiators, Inc. does not operate any hazardous waste land treatment at the Elyria, Ohio facility.

D-6. LANDFILLS (OAC 3745-57-02)

United Initiators, Inc. does not operate any hazardous waste landfills at the Elyria, Ohio facility.

D - 7 INCINERATORS (OAC 3745-57-40)

United Initiators operated a permitted hazardous waste incinerator until 2003. The incinerator has been disassembled and removed, and the unit has been closed. The incinerator was removed from the facility's hazardous waste permit via a Class 1A permit modification on October 22, 2008.

D-8 DRIP PADS (OAC 3745-57-80)

United Initiators, Inc. does not operate any hazardous waste drip pads at the Elyria, Ohio facility.

D-9 MISCELLANEOUS UNITS (OAC 3745-57-90)

United Initiators, Inc. does not operate any hazardous waste units defined as “miscellaneous units” at the Elyria, Ohio facility.

D-10 CONTAINMENT BUILDINGS (OAC 3745-205-100)

United Initiators, Inc. does not operate any hazardous waste containment buildings at the Elyria, Ohio facility.

D-11 HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE (OAC 3745-205-200)

United Initiators, Inc. does not operate any hazardous waste military munitions or explosives storage at the Elyria, Ohio facility.

D-12. HAZARDOUS WASTE BOILER

United Initiators operates a hazardous waste boiler (Boiler 2) subject to regulation under the Clean Air Act (CAA) regulations found at 40 CFR 63 Subpart EEE (the Hazardous Waste Combustion MACT). The boiler is a 4.2 mmBtu/hr unit fueled by natural gas and supplemented by liquid hazardous waste fuel. A summary of the hazardous waste boiler activities is provided below, for information purposes in this Part B permit application.

The requirements of HWC MACT apply to all hazardous waste combustors located at area sources or major sources. According to the definitions in 40 CFR 63.1201, hazardous waste combustor means “a hazardous waste incinerator, hazardous waste burning cement kiln, hazardous waste burning lightweight aggregate kiln, hazardous waste liquid fuel boiler, hazardous waste solid fuel boiler, or hazardous waste hydrochloric acid production furnace.” Hazardous waste liquid fuel boiler means “a boiler that does not burn solid fuels and that burns hazardous waste at any time. Liquid fuel boiler includes boilers that only burn gaseous fuel.” Boiler 2 burns a stream of organic peroxide hazardous waste, and thus meets the definition of hazardous liquid fuel boiler. Therefore, Boiler 2 is subject to the requirements of HWC MACT.

United Initiators performed a compliance stack test of the hazardous waste fuels boiler on March 26-27 of 2015. On May 22, 2015, Ohio EPA accepted the compliance demonstration stack test for Boiler 2, which showed that the unit operates in compliance with all the required HWC MACT limits, as presented in the following table. All are corrected to 7% oxygen.



<b>Pollutant</b>	<b>Limit</b>	<b>Test Result</b>
Particulate Emissions (PE)	80 mg/dscm	1.362 mg/dscm
Hydrochloric Acid (HCl)	31 ppmvd	0.29 ppmvd
Dioxins / Furans (D/F)	0.40 ng/dscm	0.0064 ng/dscm
Carbon Monoxide (CO)	100 ppmvd	1.6 ppmvd
Volatile Organic Compounds (VOC)	10 ppmvd	<9,74 ppmvd*

\*denotes Minimum Detection Limit (MDL)

United Initiators will comply with the applicable emission standards in 40 CFR 63.1217(a) and operating requirements in 40 CFR 63.1206(c) when hazardous waste is in the combustion chamber, except as allowable during periods of startup, shutdown, and malfunction. Note that when hazardous waste is not in the combustion chamber, Boiler 2 is exempt from requirements under 40 CFR 63, Subpart DDDDD and Subpart JJJJJ due to the fact that the Elyria Plant is an area source of HAP and Boiler 2 would only combust natural gas during such events.

United Initiators elects to use a carbon monoxide (CO) continuous emissions monitoring system (CEMS) to demonstrate and monitor compliance with the carbon monoxide and hydrocarbon standards, and continuously operates the CO CEMS in compliance with the applicable requirements. In accordance with 40 CFR 63.1206(b)(6), United Initiators will conduct and document compliance with the hydrocarbon standard during the destruction and removal efficiency (DRE) performance test.

Additionally, United Initiators will determine the as-fired heating value of hazardous waste fired in the boiler, and comply with the applicable mercury emission concentration standard. United Initiators is working with Ohio EPA, Division of Air Pollution Control,

As required under 40 CFR 63.1200(a)(2), United Initiators has submitted a Title V application to obtain a Title V operating permit under a separate cover, and requested a revision to the current PTIO into a Permit to Install (PTI). Because the revision to PTIO P0085286 does not involve a physical change or change in the method of operation, that permit revision does not constitute a modification as defined in OAC 3745-31-01(SSS).

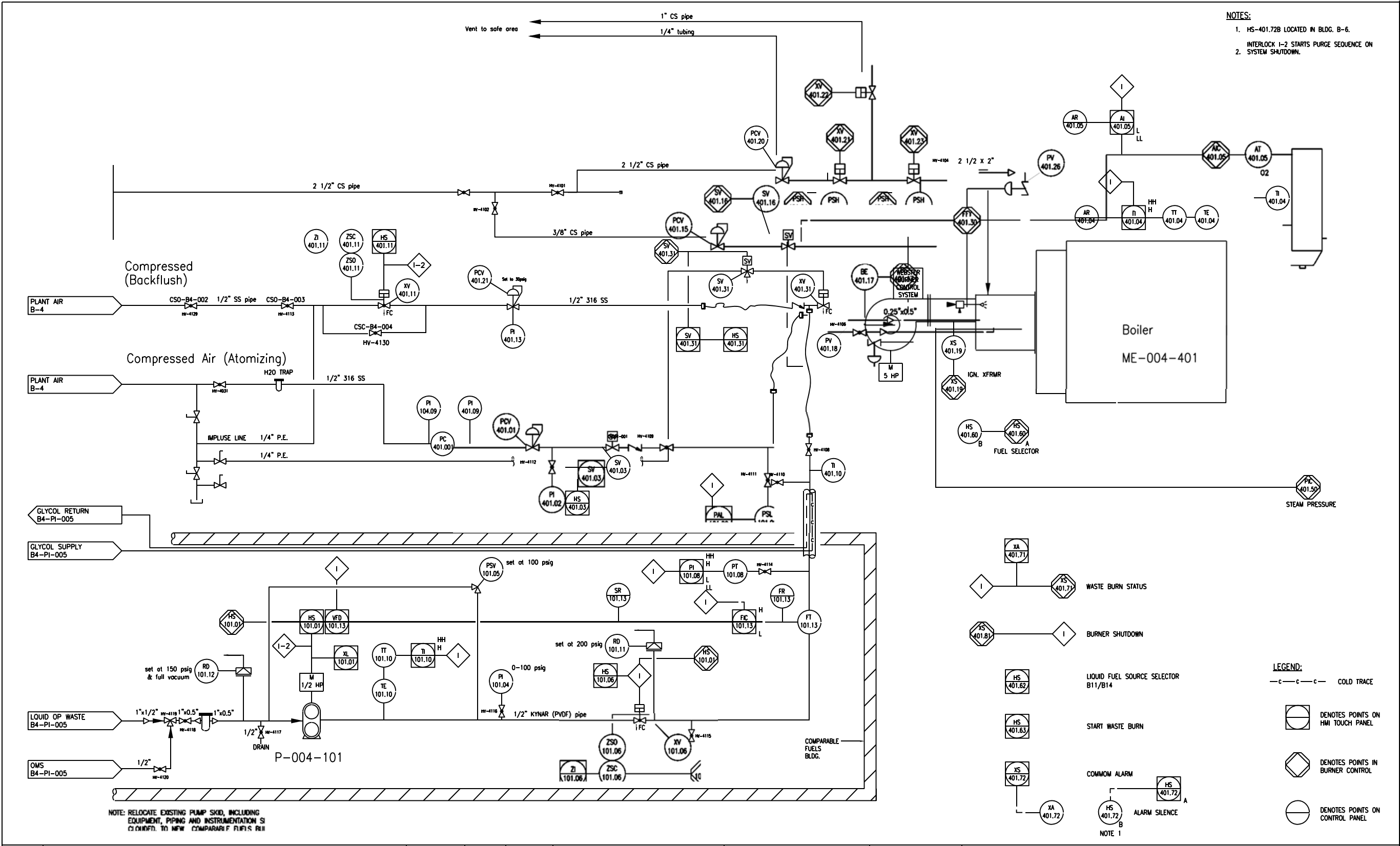
D - 13 WASTE IN BOILERS AND INDUSTRIAL FURNACES BURNING HAZARDOUS WASTES (OAC 3745-50-44(C)(9))

Treatment of hazardous waste in Boiler 2 is conducted in compliance with 40 CFR Part 63 Subpart EEE-National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors. United Initiators, Inc., has also submitted a Title V Permit application and a revised

Permit to Install/Operate to Ohio EPA Division of Air Pollution Control to permit the regulated activities associated with Boiler 2.

## **Appendix D-1**

### **Boiler 2 P&ID**



REV.	DESCRIPTION	DATE	CKD.	APP.	 <b>UNITED INITIATOR</b> <i>driving your success</i>	DRWN. SRF	LOCATION	Elyria Waste Heat Boiler FUEL SYSTEM	FILE: CADFILE	
5	Comparable Fuels AsBuilt	09/12/12	RDW			DATE 11/04/04	Elyria, OH		VFILE:	
4	Comparable Fuels DPSL Change MOC12-xx	07/16/12				CHK'D	CAR NO.		DWG. B4-PI-004	
3	Comparable Fuels Bldg. Project MOC12-15	04/12/12				DATE			SHT. 1 REV. 5	
						DWG SCALE NONE				
					PLOT SCALE					

## **Appendix D-2**

### **Tank Assessment**

United Initiators

Elyria, Ohio

April 14, 2017

## **TANK T-004-101**

### **AND TANK SYSTEM**

#### **Evaluation for Hazardous Waste Service**

Evaluation Performed by Mark Gndt, Professional Engineer – State of Ohio

Tank T-004-101, the Waste Liquid Tank and its associated system, was evaluated for use in handling hazardous waste.

#### **Chemicals Handled in System**

The system handles the following chemicals in various diluted concentrations with OMS: TBA, TBPPI, Isopar E, Isopar L (OMS), TBHP, TBPA, TBPB, TBPND, and TBPEH. The chemicals handled in the system are combustible and flammable as detailed below:

TBA: Flammable

TBPPI: Flammable

Isopar E: Flammable

Isopar L (OMS): Combustible

TBHP: Flammable

TBPA: Flammable

TBPB: Combustible

TBPND: Combustible

TBPEH: Combustible

#### **System Description**

The Waste Liquid Tank is located in a building dedicated to handling the hazardous waste. This building is immediately adjacent to the boiler building to where the hazardous waste, with the designation Comparable Fuel, is pumped and burned in the boiler.

The Comparable Fuel is brought to the building in a tote via a tow motor. The tote is raised and the fuel is gravity fed into the tank. The liquid waste is diluted with organic mineral spirits from a tote alongside

the tank and pumped by means of a gear pump to a boiler where it is atomized and combined with natural gas and burned.

Piping and Instrumentation Diagrams B4-PI-004 Rev 5 and B4-PI-005 Rev 1 accurately show the system as it is currently installed.

### **System Safeguards**

**Vapors** – The Comparable Fuel vapor is non-hazardous in the concentrations present. During unloading of the Comparable Fuel the building overhead door is open so no accumulation of vapors takes place. The tank has a closed top but is vented to atmosphere. A wall fan vents the vapors to the outdoors preventing a buildup of vapor within.

**Liquid Spills** – A sump within the building captures liquid spills from tank loading, tank leakage, or piping leakage. Leaks are detected by means of a level alarm in the sump which alerts operators of leaks or spills which have drained into the sump. The building floor is sloped such that any leaks from the tank, piping, pumps, or any other ancillary equipment drain to the sump, at which time the leak would be detected by activation of the level alarm. The secondary containment area has a coating that is chemically resistant and compatible with the materials processed through the tank system.

As a result of the tank being filled with the hazardous waste by means of gravity through a hose between the waste tote and the pipe connection in the top of the tank, the waste liquid cannot backflow or otherwise be spilled into the environment. The hose fully drains into the tank before being uncoupled. Valves isolate the tote and fill and outlet connections on the tank. The top of the tank is fitted with a lid and kept closed at all times, thus no splashing of the liquid can result in external spillage. The tank utilizes a high level alarm to prevent overfilling.

**Overpressure** – The tank is vented to atmosphere and thus cannot be over-pressurized from within. The glycol circulation pump cannot achieve sufficient pressure to exceed jacket design pressure. The waste transfer pump and pump piping are protected from overpressure due to a blocked-in condition by a relief valve and rupture disk on the pump discharge and a rupture disk on the pump section.

### **System Design**

The system design as presented on the P&IDs and other documents was studied. The system was designed as a joint effort between United Initiators and Chemstress Consultant Company of Akron, Ohio in 2011. The system was installed and put into service in 2011 and is essentially unchanged since then. All design documents are still available and valid.

The design appears to be a proper design consistent with good practices used in handling hazardous wastes. Proper system safeguards appear to be in place.

The tank, tank contents, agitator, and tank piping weigh approximately 5500 lbs. The foundation consists of a 6" thick concrete slab reinforced by wire mesh. This foundation can accommodate a load of approximately 10,100 lbs. due to the tank, contents, etc.

A field check of the system P&IDs was made, and the P&IDs match the system as it is currently installed.

### **Mechanical Integrity**

Tank – The Waste Liquid Tank is a jacketed glass-lined pressure vessel with a carbon steel inner shell and an F&D head and a full carbon steel jacket. The waste wetted surfaces only contact the glass lining. The glass lining of the tank is compatible with the liquid within, and the tank is fully capable of the pressures, temperatures, and stresses to which it is exposed. Should the glass lining fail, the carbon tank shell would fully prevent leakage into the outer jacketed lining. The outer jacket is designed as part of the cooling system for the tank. It is not to be considered as part of a double walled containment system. UI conducts spark testing of the glass liner every 5 years to ensure integrity of the glass lining. Inspections of the tank and ancillary equipment are also completed on a daily basis.

The tank is designed and stamped to ASME Section 8. The tank was fabricated in 1990 by Pfaudler and purchased by United Initiators in 2011 as used equipment.

The inside diameter of the tank is 48", outside diameter of the jacket 54", with a 40" inside shell length. Total capacity is 375 gallons. The shell is rated at 100 psi/FV at 450 degF, the jacket at 90 psi at 350 degF. The U-1 Manufacturer's Data Report is on file.

An API-510 inspection was performed on the tank in 2011 prior to installation, with the inspection report on file. Ultrasonic thickness readings were taken on the jacket shell and head. ASME calculations for wall thickness were performed, and the measured vessel wall was found to be satisfactory for the design conditions. A spark test was performed on the glass lining and no defective areas found.

In November 2016 another spark test was performed on the glass lining as well as a visual inspection and no defective areas were found. Considering that the tank was in service for only four years, was in good condition when installed, the jacket seeing only a very low-corrosion rate closed loop glycol system, and no atmospheric corrosion present it was judged that thickness testing of the jacket was not necessary.

The plant has handled the waste chemicals for years and found the chemical resistance of the chemicals to glass and Kynar, the material for the piping, to be very good. Future corrosion should not be an issue, with the tank interior being glass lined, the jacket seeing a low-corrosion fluid, and an indoor installation preventing any appreciable atmospheric corrosion.

System – A visual inspection of the system was performed. All equipment, piping, instrumentation, tank supports, etc. appeared to be in good, operable condition and do not exhibit degradation having taken place during their period of operation.



## Summary

Based on my observations, I feel this tank and the tank system are acceptable for hazardous waste service.

"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 who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Mark Gndt

Chemstress Consultant Company

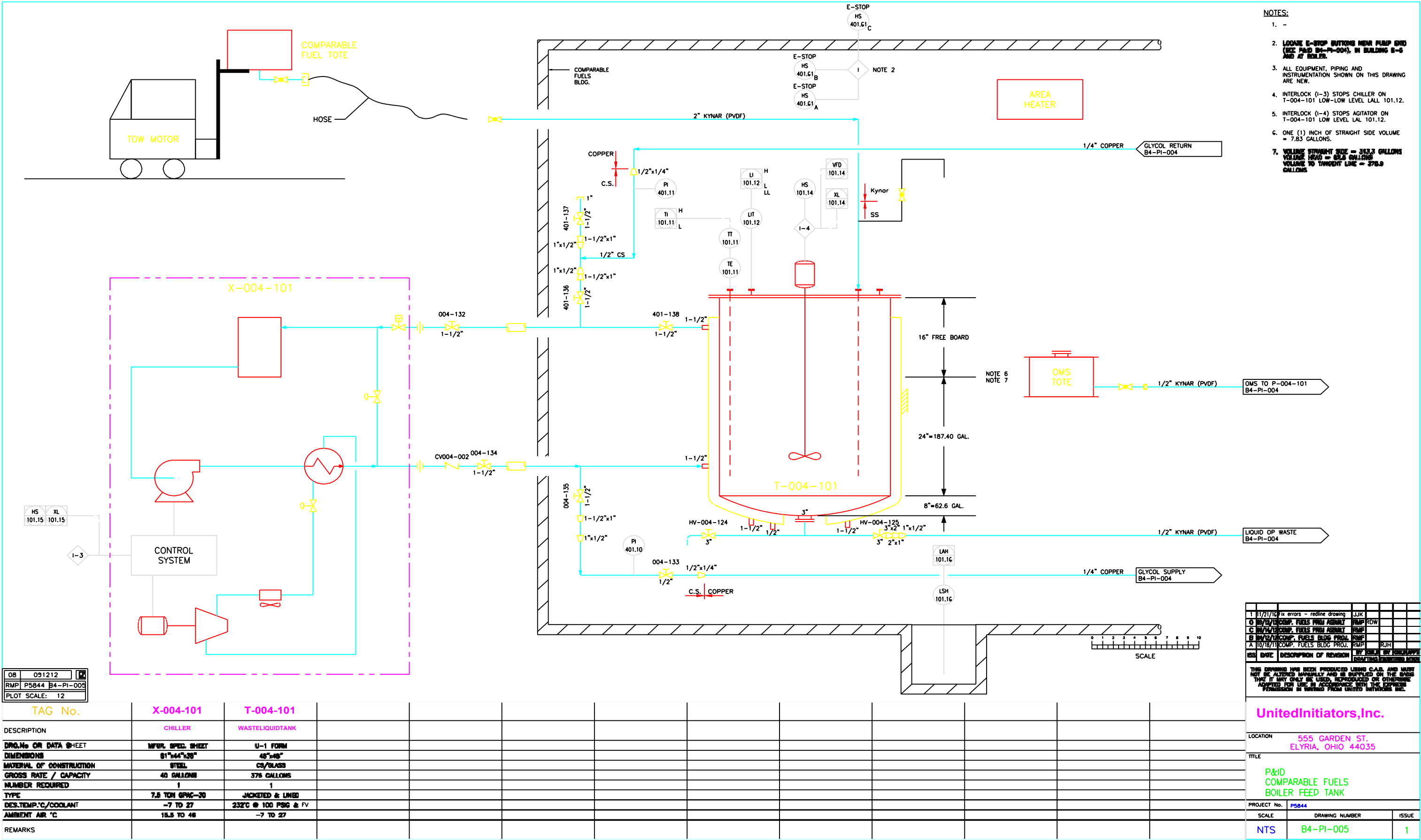
Professional Engineer, State of Ohio



## **Appendix D-3**

### **Boiler Feed Tank**

#### **P&ID**



## **Appendix D-4**

### **Ohio EPA Determination on**

### **Description of Operations, or an Evaluation of the Applicability of**

### **OAC 3745-50-40(I)**

**Reserved for Ohio EPA Determination Response**

## **SECTION E**

### **GROUND WATER MONITORING SYSTEMS**

The United Initiators, Inc. facility does not include landfills, surface impoundments, waste piles, land treatment, or miscellaneous units with the potential for groundwater contamination. For that reason and as per OAC-3745-54-90, the requirements for ground water monitoring at OAC 3745-54-91 through 3745-54-100 do not apply to the United Initiators, Inc. facility, and a groundwater monitoring program is not required.

## **SECTION F**

### **PROCEDURES TO PREVENT HAZARDS**

The information provided in this section is submitted in accordance with the requirements of OAC 3745-54-30.

The following subject areas will be covered in this section: general security provisions; inspection schedules; refusal of waiver of preparedness and prevention requirements; spill prevention, containment, and countermeasures plan; and prevention of accidental ignition or reaction of ignitable, reactive, or incompatible wastes.

#### **F - 1 SECURITY**

##### **F - 1a Waiver (OAC 3745-54-14(A))**

United Initiators, Inc. does not request a waiver of the security requirements stated in 40 CFR 264.14(a)(1) and (2) regarding injury to unauthorized personnel and violations that they may incur.

##### **F - 1b General Security Procedures and Equipment (OAC 3745-54-14(B))**

Unauthorized access to the production portion of the facility is provided via fencing and gates. All visitors to the plant must report to the front office in B2/Building B2, to Shipping & Receiving, or to Maintenance in B30/Building 30 where they sign in, receive a visitor's pass, and are given any instructions necessary. All drivers and contractors visiting the plant are required to have proper safety equipment, and receive instruction in plant safety requirements. Drivers making deliveries must be escorted to the proper unloading area. Visitors to the office areas remain in the lobby until they are directed or escorted to the proper location. All visitors to the office areas who are to enter the plant area must have proper safety equipment and be informed of safety requirements prior to entering the plant.

An internal telephone system provides communication onsite. The system also provides voice paging throughout the plant. Handheld radios are also used to communicate throughout the site.

Automatic LED, sodium, and metal halide type lights throughout the plant provide lighting at night.

##### **F - 1b(1) 24 Hour Surveillance System OAC 3745-54-14(B)(1)**

All gates on Garden Street used for everyday operations are monitored by video cameras and any movement is recorded and stored for no less than one day. In addition to the security system, the

production areas are in operation 24-hours a day, seven days a week. Production personnel work throughout the plant and any unauthorized visitors or abnormal conditions are reported to their supervisor immediately.

F - 1b(2) Barrier (OAC 3745-54-14(B)(2)(a))

The entire active portion of the facility is enclosed within a 6ft. high chain link fence topped by the three strands of barbed wire. The fence has the following gates:

Three large vehicle gates (Gates A, B, and C) located on Garden Street provide the primary access to the facility. Gate C can be operated remotely. On Monday through Friday (except holidays), Gate A, the main gate, typically remains open from one hour before the start of day shift until one hour after the start of night shift. On weekends and holidays, Gate A remains closed and secured all day, with the exception of the time periods of one before to one hour after each shift change. Gate B, the shipping / receiving gate, will be opened each morning by an employee assigned to that department. It will be secured by the shift supervisor after all shipping traffic has ceased for the day. Gate (C) is an electric gate with entry controlled by an electronic card reader.

Two vehicle-gates and one man gate are located on the north side of the property, near the parking lot. All gates along the north fence line remain locked at all times when not in use. These gates, which are used less frequently than the Garden Street gates, are equipped with mechanical locks which can only be opened by the shift supervisor on duty. Vehicle Gate E is opened when needed to allow entry of such traffic as raw material delivery vehicles.

A large vehicle gate along the west fence line provides access to the inactive back portion of the property. This power driven gate, located at the west end of the active portion of the facility, can be remotely operated and is kept closed and locked at all times when not in use.

In addition to the external fence, access to the facility beyond the main office building and the shipping and receiving building is controlled in the following manner:

A fence with a locked man gate extends between the north fence and the office building. This serves to restrict access from the parking lot into the plant, requiring entry through the office building.

An electrically activated vehicle gate extends between the office building and the shipping and receiving building. An electronically-activated man gate is also located in this fence line. These gates are closed and secured during operating hours and are mainly used to prevent vehicles from entering the active portion of the facility.



F - 1b(3) Means To Control Entry (OAC 3745-54-14(B)(2)(b))

Entry to the facility is controlled by the gate system, warning signs, and the visitor sign-in authorization system. All man gates that are not locked with a mechanical lock require either (1) a company issued security card to be swiped or (2) entry can be granted from an individual from within the facility.

F - 1c Warning Signs (OAC 3745-54-14(C))

Signs that are legible from a distance of 25 feet are posted at all gates and on other fence locations around the facility. These signs are visible from all angles of approach and bear the following legend: "Danger - Unauthorized Personnel Keep Out". Other signs stating "No Smoking" are posted at all entrances to the active portion of the facility. These signs and others supplement plant regulations that do not allow any smoking paraphernalia or food and drink within the production areas.

F - 2 INSPECTION SCHEDULE

F - 2a General Inspection Requirements (OAC 3745-54-15)

United Initiators conducts regular inspections of the facility regarding equipment conditions and operations, structural deterioration, operator errors, and discharges of hazardous waste that could cause or lead to damage of the environmental or human health.

F - 2a(1) & 2a(2) Types Of Problems, Frequency Of Inspections (OAC 3745-54-15(B)(3) and (4))

The facility inspection schedules for the permitted hazardous waste units and associated operations are provided in Tables F-1 and F-2. These include Boiler 2, safety and emergency equipment, and security devices, and list the items to be inspected, the types of problems to look for, and the frequency of inspection. Examples of the inspection log sheets are provided in Appendix F-1 – Examples Inspection Forms.

**Table F-1, Safety Equipment and Security Inspection Schedules**

<b>Item</b>	<b>Problems Encountered</b>	<b>Frequency</b>
Emergency Showers & Eyewash	Water Pressure, Leaks, Drainage	Weekly
Generators	Fuel Supply, Oil Levels	Weekly
Emergency Lights	Battery Or Bulb Failure	Weekly
Fire Extinguishers	Charge Levels	Monthly
Fire Blankets	Missing, Bag torn or Holder Broken	Monthly
Spill Cleanup Tools	Tools Missing or Damaged	Monthly
Portable Pumps	Motor Seizure, Clogs	Monthly
Industrial Absorbents	Out Of Stock	Monthly
Recovery Drums	Corrosion, Out Of Stock	Monthly
Fire Alarm System	Malfunction	Quarterly
Evacuation Horn	Malfunction	Quarterly
Warning Signs	Damage Or Corrosion	Quarterly
Weather Radio	Unplugged, Dead Battery	Quarterly
Facility Fence	Corrosion, Damage	Quarterly
Main Gates	Corrosion, Damage, Locks	Quarterly
West Gate	Corrosion, Damage, Locks	Quarterly
Shipping and Receiving Gate	Corrosion, Damage, Motor & Power	Quarterly
Man Gates	Corrosion, Damage, Locks	Quarterly
Combustible Gas Meter	Calibration, Operable	Quarterly

**Table F-2, Daily Inspection Schedules**

<b>Item</b>	<b>Problems Encountered</b>
Pumps	Visible Leaks, Corrosion, Condition, Security
Valves	Visible Leaks, Corrosion, Condition, Security
Piping, Flanges	Visible Leaks, Corrosion, Condition, Security
Instruments / Gauges	Obstruction, Condition
Boiler	Operability; Visible Leaks Or Emissions
Burners	Obstruction, Operation, Condition
Boiler Room Floor/Secondary Containment	Condition, Spilled Materials
Transfer Hose	Condition, Leaks
Working Tank	Condition, Leaks

The United Initiators inspection program also includes items that are not covered under this hazardous waste permit application, including generator satellite accumulation and less than 90 day accumulation areas.

F – 2a(3) Remedial Actions (OAC 3745-54-15(C))

If an inspection reveals that maintenance is needed repairs will be made as soon as possible to prevent further damage to the equipment and reduce the chance of an emergency. If an inspection reveals an imminent hazard a remedial action will be taken at once. Any employee discovering a problem will notify their immediate supervisor. The supervisor will ensure that the appropriate remedial action is completed. In case of an emergency involving a spill or other release of hazardous materials to the environment, all efforts will be made to contain the release, remove it, and decontaminate the area as outlined in the Contingency Plan.

Remedial actions are documented on the inspection forms. Work orders are issued to document that repairs have been requested and completed. When the repairs have been completed, the information is entered into the site maintenance management system and the work order is closed.

F – 2a(4) Inspection Logs (OAC 3745-54-15(D))

Inspection log records are maintained onsite and kept for a minimum of three years. These records may be kept in either hardcopy or electronically. Example inspection logs are included in Appendix F-1. The content of these logs will not change, but the format and method of recording information may be modified.

F -2b SPECIFIC PROCESS INSPECTION REQUIREMENTS

F – 2b(1) Container Inspection (OAC 3745-54-44(A)(5), OAC 3745-55-74)

At this time, United Initiators does not operate any permitted hazardous waste container storage areas. Therefore the Part B Permit Application inspection requirements for container storage areas are not applicable to this Inspection Plan. However, the facility's satellite accumulation and less than 90 day accumulation areas are inspected in accordance with the generator requirements (OAC 3745-34(A)).

F – 2b(2) Tank Inspections (OAC 3745-50-44(A)(5), 3745-55-95)

At this time, United Initiators does not operate any permitted hazardous waste tanks. The skim tanks are part of the wastewater treatment system and are managed in accordance with applicable requirements under the Clean Water Act. Therefore, the Part B Permit Application inspection requirements for tank storage units are not applicable to those tanks.

The working tank that feeds Boiler 2 is managed as a Large Quantity Generator (LQG) accumulation tank, and does not require a RCRA permit. This tank is inspected in accordance with the large quantity generator requirements (OAC 3745-34(A)).

F – 2b(3) through 2b(8) Other Treatment, Storage, And Disposal Units

United Initiators does not operate any hazardous waste piles, surface impoundments, land disposal facilities, incinerators, containment buildings, or military munitions facilities.

F – 2b(9) BOILER INSPECTIONS

Boiler 2 and its associated equipment are inspected regularly for deterioration, operator errors, and other conditions or releases which could endanger human health or the environment. The types of hazards uniquely associated with the boiler operations have been used to establish the elements and frequency of inspection. Note that all areas subject to spills are inspected daily when in use.

The focus of inspections of Boiler 2, boiler room, and waste fuel delivery piping include:

- Visual inspection of pumps, valves, pipes, and ancillary equipment for leaks, spills, fugitive emissions, deterioration of equipment and signs of tampering; and
- Evidence of spills;

The typical inspection elements and their respective frequencies of inspection for Boiler 2 and the boiler room are shown in Table F-2.

F – 3 DOCUMENTATION OF PREPAREDNESS AND PREVENTION REQUIREMENTS

F – 3a Exemption from Preparedness and Prevention Requirements

United Initiators does not intend to request a waiver of or exemption from the preparedness and prevention requirements.

F – 3b Design and Operation of Facility (OAC 3745-54-31)

As described in Sections B, D, and G of this Part B permit application, the facility is designed and operated to minimize the possibility of fire, explosion and any unplanned sudden or non-sudden release of hazardous waste or constituents to air, soil, or surface water which could threaten human health or the environment.

F – 3c through F-3e Equipment Requirements (OAC 3745-54-32)

Appendix G-3 to the hazardous waste contingency plan provides a list of all emergency equipment at the facility, including fire extinguishing systems, spill control equipment, communication and alarm systems (internal and external), and decontamination equipment. The locations of all equipment are included in this listing. The Contingency Plan is updated regularly to reflect changes in the types and locations of emergency equipment used at the facility.

Equipment used for containing and cleaning up spills of hazardous wastes are stored onsite. These include tools, (shovels and brooms), wood, vermiculite, absorbents, and portable pumps. All materials used to absorb spills are compatible with the hazardous wastes generated at the facility.

Other emergency equipment at the facility includes fire extinguishers, fire blankets, eyewash fountains, and safety showers. This equipment is available to employees at all times.

First aid stations are maintained in several locations of the site. They are maintained by a third party and inspected and replenished on a frequent basis.

Protective clothing and equipment is provided to protect employees during normal and emergency operations. Hard hats, safety glasses, steel toed shoes, and work uniforms are required at all times. Other protective equipment kept available on site at all times includes safety gloves (cloth and chemical resistant rubber, nitrile, and latex); face shields and splash goggles; and chemical suits.

The internal communications systems used to provide immediate emergency instruction to facility personnel include a plant-wide public address system, alarm system, two-way radios, and telephones. These are discussed in further detail in the facility's hazardous waste contingency plan (Section G) and the facility's Disaster and Emergency Manual that is maintained onsite.

An automatic alarm system alerts the continuous monitoring company who in turn notifies the Elyria Fire Department whenever there is water flow in the sprinkler / deluge fire suppression system. Two-way radios and telephones can be used to summon assistance from the Elyria police departments, Elyria fire departments, Lorain County LEPC, and/or state or local emergency response teams, as needed.

All offices, labs, and production buildings are protected by automatic sprinklers and/or deluge equipment, although certain portions of any building may not be sprinkled (i.e., electrical rooms). The fire department is notified automatically of any water flow in the sprinkler/deluge system.

Portable fire extinguishers carrying the A, B, C, rating are available throughout the facility. Every office and production building contains at least one of these extinguishers. All extinguishers are inspected monthly. Records of these inspections are kept onsite for a minimum of 3 years.

Fire hydrants located throughout the facility and along Garden Street provide water at adequate volume and pressure to supply all water hose streams, automatic sprinklers, and fire suppression deluge systems at the Elyria facility.

All personnel involved in hazardous waste activities at the United Initiators facility have immediate access to an internal alarm or emergency communication device, which include but are not limited to telephones, two-way radios, and the facility P.A. system.

All equipment and hazardous waste will be managed to provide unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment.

#### F – 3f Arrangements with Local Authorities

The facility has provided the Elyria Fire Department, Elyria Police Department, Lorain County LEPC, and UH Regional Medical Center with the facility's hazardous waste contingency plan. This information includes a layout of the facility; discussion of the hazardous waste handled and associated hazards; locations where employees are normally working; entrances to the facility and roads within the facility; and possible evacuation routes.

When more than one police and fire department may respond to an emergency, primary responsibility falls to the Elyria Fire Department.

The Contingency Plan in Section G lists the emergency response teams, contractors, and equipment suppliers with whom arrangements have been with for responding to the United Initiators facility.

Arrangements have been made with the UH Regional Medical Center to familiarize them with the properties of hazardous waste handled at the United Initiators facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

#### F – 4 PREVENTIVE PROCEDURES, STRUCTURES, AND EQUIPMENT

##### F – 4a Loading/Unloading Operations (OAC 3745-50-44(A)(8)(a))

Loading and unloading takes place at the skim tanks and the working tank. Wastes are pumped from the skim tanks into a portable container (e.g. tote) and taken via fork truck to the working tank, where the portable container is connected and gravity fed to the working tank. In the event of a spill the material would be contained or absorbed using standard industrial absorbents. Contaminated material would then be cleaned up and placed in a container for proper disposal off-site as generated waste.

Precautions have been taken to reduce the potential for hazards during hazardous waste loading / unloading operations. Loading and unloading is performed in areas that allow access with the forklift. All drummed wastes are transported on pallets.

##### F – 4b Runoff (OAC 3745-50-44(A)(8)(b))

Runoff from the production areas of the facility flow into the site's industrial drains and are collected in a retention basin onsite. All other runoff flows into drains or ditches that lead to the city's storm sewers. Because the facility is located outside the 100-year floodplain, no special provisions are necessary to minimize flooding on the facility property.

##### F – 4c Water Supplies (OAC 3745-50-44(A)(8)(c))

Ground water contamination is prevented by eliminating the discharge of hazardous materials onto the ground. All areas of the plant where wastes are handled are situated on concrete or asphalt, to prevent ground contamination.

##### F – 4d Equipment And Power Failure (OAC 3745-50-44(A)(8)(d))

The only area of the plant where equipment or power failure could directly affect hazardous waste operations is Boiler 2. The boiler has several fail safe circuits that will shut it down immediately in the event of a problem. All waste in the feed system will be automatically purged back to the working tank as a safety precaution. During a prolonged power outage the contents of the working tank may be emptied into a tote and then placed into refrigerated storage as necessary.

During a power outage emergency systems and lighting in plant are equipped with automatic emergency power via the plant's emergency generators. In the event of a prolonged power outage, all plant operations are shut down. Refrigerated buildings may utilize dry ice, wet ice, or solid CO<sub>2</sub> to provide cooling in the event of a prolonged power outage.

The facility telephone system will operate on battery power backup during a power outage. In addition, most members of the management team also have cellular phones that can be used during emergencies. The shift supervisor has been provided with an intrinsically safe cell phone, which can be used in areas of the plant where other cell phones cannot. Two way radios may also be used during the event of a power outage. See the appropriate sections of the contingency plan for details.

#### F – 4e Personal Protective Equipment (OAC 3745-50-44(A)(8)(e))

All personnel are regularly trained in the use of emergency protective equipment. Plant personnel are required to wear a hard hat, safety glasses, safety shoes, and work uniforms when on duty. Available protective equipment is presented in the Contingency Plan (Section G). Use of protective equipment is addressed in initial and annual training, as outlined in the Training Plan (Section H).

#### F – 5 PREVENTION OF REACTION OF IGNITABLE, REACTIVE, AND INCOMPATIBLE WASTES

Sources of ignition are minimized and contained outside of the office and maintenance areas of the facility. Matches, lighters, or other sources of ignition are not allowed within the production areas without approval of a hot work permit that is issued by authorized personnel at United Initiators. Signs are posted at all entrances to the production area stating this rule. Spark proof tools are used on all containers storing ignitable wastes.

All process wastes treated at the United Initiators facility are mutually compatible. No mixing of incompatible wastes are allowed at United Initiators, Inc.

Prior to placement in less than 90 day accumulation area, each waste container is closed, sealed, and properly labeled. Proper seals prevent escape of the waste or its vapors and prevent precipitation from entering the drums. Labeling the container provides information as to the waste identification and the date the waste was generated. All containers are stored on pallets to minimize contact with accumulated rainwater, leaks, or spills. Skim tank wastes are held in totes, which are placed in chilled storage areas (B19) when not being transferred into the working tank for treatment in Boiler 2.

In the unlikely event that incompatible wastes are generated (e.g., in the facility laboratory), these containers of wastes will be properly segregated.



There is no mixing of incompatible wastes in tanks at the United Initiators facility. Reactive wastes are placed in the working tank. Wastes placed into this tank are diluted with mineral spirits to reduce the active oxygen content to approximately 2%, which minimizes the potential for reaction.

All reactive and ignitable wastes are stored in accordance with NFPA requirements.

# **Appendix F-1**

## **Example Inspection Forms**

**BOILER 2 AND WORKING TANK INSPECTION LOG SHEET**

ITEM	PROBLEMS ENCOUNTERED	STATUS OK?	STATUS NOT OK?	OBSERVATIONS	REMEDIAL ACTION NEEDED
PUMPS	VISIBLE LEAKS, CORROSION, CONDITION, SECURITY				
VALVES	VISIBLE LEAKS, CORROSION, CONDITION, SECURITY				
PIPING, FLANGES	VISIBLE LEAKS, CORROSION, CONDITION, SECURITY				
INSTRUMENTS / GAUGES	OBSTRUCTION, CONDITION ACCEPTABLE				
BOILER	OPERABILITY; VISIBLE LEAKS OR EMISSIONS				
BURNERS	OBSTRUCTION, OPERATION, CONDITION				
BOILER ROOM FLOOR/SECONDARY CONTAINMENT	CONDITION, SPILLED MATERIALS				
TRANSFER HOSE	CONDITION, LEAKS				
WORKING TANK	CONDITION, LEAKS, CORROSION				
WORKING TANK SECONDARY CONTAINMENT	CRACKS, SPALLING, EVIDENCE OF LIQUIDS				

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

**SAFETY & EMERGENCY WEEKLY INSPECTION LOG SHEET**

**AREAS B4, B9, & B19**

ITEM	PROBLEMS ENCOUNTERED	STATUS OK?	STATUS NOT OK?	OBSERVATIONS	REMEDIAL ACTION NEEDED
EMERGENCY SHOWERS & EYEWASH	WATER PRESSURE, LEAKS, DRAINAGE				
FIRE BLANKETS	MISSING, BAG OR HOLDER BROKEN OR TORN				
EMERGENCY LIGHTS	BATTERY OR BULB FAILURE				

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

**SAFETY, EMERGENCY, & SECURITY DEVICE MONTHLY INSPECTION LOG SHEET**

ITEM	PROBLEMS ENCOUNTERED	STATUS OK ?	STATUS NOT OK ?	OBSERVATIONS	REMEDIAL ACTION NEEDED
PORTABLE PUMPS	MOTOR SEIZURE, CLOGS				
INDUSTRIAL ABSORBENTS (Pole Barn)	ADEQUATE SUPPLY (MIN. 10 BAGS)				
RECOVERY DRUMS	OUT OF STOCK				
FIRE EXTINGUISHERS (B4, B9, B19)	CHARGE LEVELS				
SPILL CLEANUP KITS (B4)	SEAL BROKEN, MISSING SUPPLIES				
SPILL CLEANUP KITS (B9)	SEAL BROKEN, MISSING SUPPLIES				
SPILL CLEANUP KITS (B19)	SEAL BROKEN, MISSING SUPPLIES				
COMBUSTIBLE GAS METERS	CALIBRATED, OPERABLE				

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

**SAFETY, EMERGENCY, & SECURITY DEVICE QUARTERLY INSPECTION LOG SHEET**

ITEM	PROBLEMS ENCOUNTERED	STATUS OK ?	STATUS NOT OK ?	OBSERVATIONS	REMEDIAL ACTION NEEDED
WARNING SIGNS	DAMAGE OR CORROSION				
FIRE ALARM SYSTEM	MALFUNCTION				
EVACUATION HORN	MALFUNCTION				
WEATHER RADIO	UNPLUGGED, DEAD BATTERY				
COMMUNICATION DEVICES (2-WAY RADIOS, TELEPHONES, PA SYSTEM)	INOPERABLE, DAMAGED				
FACILITY FENCE	CORROSION, DAMAGE				
MAIN GATES A, B, C, D, E, F, G	CORROSION, DAMAGE, LOCKS				
S & R GATE	CORROSION, DAMAGE, MOTOR & POWER				
MAN GATE	CORROSION, DAMAGE, LOCKS				

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

## **SECTION G**

### **CONTINGENCY PLAN**

The information provided in this section is submitted in accordance with the requirements of OAC 3745-54-50 through 56, and describes the actions that are to be taken in the event of a hazardous waste emergency. This plan has been developed to supplement the United Initiators Disaster and Emergency Manual, which is designed around the elements required by Process Safety Management (PSM) regulations as they apply to all facility operations.

Major components of this hazardous waste operations Contingency Plan are summarized below, supplemented by attachments.

#### **G - 1 GENERAL**

##### **G - 1a Floodplains (OAC 3745-54-18(B))**

The United Initiators facility is located entirely outside the one-hundred year floodplain, and therefore the requirements of OAC 3745-54-18(B) do not apply.

##### **G - 1b General Information OAC 3745-54-52**

This Contingency Plan is for the United Initiators facility located at 555 Garden Street, Elyria, Ohio (see Appendix G-1 for a facility location map). United Initiators owns and operates this facility, which manufactures peroxides in solid and liquid form. Section B of the Part B Permit application contains a detailed description of the facility and Section C includes a description of the wastes that can be expected to be handled. These sections have been provided along with this contingency plan to local emergency organizations.

##### **G - 2 EMERGENCY COORDINATORS (OAC 3745-54-52(D), 3745-54-55)**

Appendix G-2 provides a list of the emergency coordinators at the United Initiators facility, as of the date of this submittal. If a hazardous waste emergency situation should develop at the facility, the discoverer will immediately contact the shift supervisor, who will contact one of the emergency coordinators. The emergency coordinator will evaluate the situation, consult appropriate experts within the company as needed, and take action to prevent further damage to the facility, the environment, and human health. The emergency coordinators and alternate emergency coordinators have authority to commit all

resources of the company in order to stabilize the situation. The emergency coordinators are identified in Appendix G-2. An emergency coordinator is on-site or on-call at all times.

The Site Manager is in charge of the first line of action in the event of an emergency (i.e., the primary Emergency Coordinator).

All emergency coordinators and alternate emergency coordinators have been trained in accordance with the facility Training Plan (Section H) and are familiar with all aspects of the Hazardous Waste Contingency Plan and the facility Emergency Plan, including all operations and activities at the facility, the location and characteristics of wastes handled, the location of all records within the facility, and the facility layout.

G - 3 IMPLEMENTATION (OAC 3745-54-52(A), 3745-54-51)

The major categories of emergencies include fire, explosion, spill or release, natural disaster, or civil unrest. The United Initiators Contingency Plan will be implemented immediately, whenever there is an emergency involving hazardous waste which could threaten human health or the environment. The guidelines used by the emergency coordinator in making the decision to implement the hazardous waste contingency plan are listed below.

<b>Contingency Plan Implementation Criteria:</b>
A fire or explosion that requires outside assistance, or threatens a release of hazardous waste constituents off-site.
A spill or release that has the potential to cause off-site soil and/or surface water contamination or that requires outside assistance to contain and cleanup.
Natural disaster: <ul style="list-style-type: none"><li>• The facility is in a projected tornado path.</li><li>• An earthquake has occurred and damaged the property.</li></ul>
Civil Unrest. <ul style="list-style-type: none"><li>• Site security system has been breached by an individual's intent on causing harm or damage.</li></ul>



#### G - 4 EMERGENCY RESPONSE PROCEDURES

United Initiators has developed response procedures for a variety of potentially dangerous situations, including fire or explosion, spill or release, natural disaster, or civil unrest. The response to each of these is addressed below.

##### G – 4a Notification (OAC 3745-54-56(A) and (D))

A major plant emergency may be declared in the event of a fire or explosion, spill or release, natural disaster, or civil unrest. It can be announced by sounding plant fire alarm, emergency evacuation siren, a verbal warning by public address system, two-way radios, telephone call, or as a direct order of the production supervisor. Furthermore, in the event of a major plant emergency, staff are directed to spread word of the alarm to co-workers (contract and maintenance personnel); evacuate the affected building or area (unless the employee has a specific emergency assignment); and evacuate all other buildings or areas (unless the employee has a specific emergency assignment).

Upon discovery of an emergency situation involving hazardous waste, the emergency coordinator, facility personnel, appropriate federal, state, and local agencies, and fire and police departments will be notified as appropriate. Appendix G-4 includes a list of outside individuals and companies which may provide assistance in the event of an emergency. This list is regularly maintained and updated to reflect current and accurate information.

Each time the contingency plan is implemented, details of the incident will be noted in the facility operating record. Within 15 days, United Initiators will provide written documentation to the Ohio EPA of any significant incident that requires implementation of this contingency plan that causes or may cause harm or hazard to human health and the environment on- or off-site.

In the event of a possible evacuation the emergency coordinator will immediately contact local authorities, and be available to help those officials decide whether evacuation is necessary.

Prior to resuming operations in the affected area(s) of the facility, the facility will notify the director of Ohio EPA and appropriate local authorities that the facility is in compliance with OAC 3745-54-56 (H).

G – 4b Identification of Hazardous Materials (OAC 3745-54-56(B))

The emergency coordinator or his designee will immediately determine the type of hazardous release, its amount, and the area that has become contaminated or is threatened to become contaminated. This will be accomplished by visually inspecting the scene of the release and consulting the operating log and other information available in the operating record to determine which wastes may be stored or treated in the affected area(s). If for some reason, the released material cannot be identified, samples will be taken for chemical analysis. All facility staff involved in identifying the affected materials have been properly trained to perform this evaluation, as per the Training Plan (Section H).

The majority of hazardous waste activities involve transfer of wastes into and out of the working tank for Boiler 2, which occurs at Building B-4. Additional points of hazardous waste activity are the less than 90 day accumulation areas and the removal of wastes from the skim tanks for transfer to the working tank.

G – 4c Assessment (OAC 3745-54-56(C) and (D))

The emergency coordinator will assess all possible direct and indirect hazards to the environment or human health and notify local, state, and federal authorities as necessary.

The emergency coordinator will identify the hazardous waste, exact source, amount and extent of any released material as a result of fire, explosion, spill or release.

G-4d Control Procedures (OAC 3745-54-52(A))

Fire and /or Explosion

All permitted and generator hazardous waste operations can easily be accessed by firefighting equipment and other emergency vehicles via the site's road system. The road is generally kept clear at all times, only being blocked by loading and unloading vehicles that can be moved very quickly.

The following procedures are followed in the event of a fire:

1. All workers are notified of a fire or explosion via the fire alarm, evacuation horn, two way radio, telephone or page system, and are evacuated to their designated area.
2. Verification of a fire situation is made with the fire department to ensure that they have been notified via the automatic alarm.
3. All production buildings are shut down as soon as a safe point is reached in the process.

4. The emergency coordinator determines what actions must be taken, based upon the individual situation.
5. Any injured personnel are removed to a safe area, given first aid, and transported to an urgent care facility or hospital if necessary.

#### Spill or Release

In the event of a major emergency involving a spill or release of hazardous waste, the following procedures will be used for rapid and safe response and control of the situation, as described below.

If an employee discovers a spill or release, he or she will immediately report it to the shift supervisor. The shift supervisor will immediately contact an emergency coordinator. When contacted, the designated emergency coordinator will obtain information pertaining to the following:

1. The hazardous waste spilled or released.
2. Location of the release or spillage of the hazardous waste.
3. An estimate of quantity released and the rate at which it is being released.
4. The direction in which the spill or vapor is headed.
5. Any injuries involved.
6. The possibility of a fire and/or explosion occurring.

This information will help the emergency coordinator to assess the magnitude and potential seriousness of the spill or release. If the accident is determined to lie within the company's emergency response capabilities, the emergency coordinator will contact and deploy the necessary in-plant personnel. If the accident is beyond plant capabilities, the emergency coordinator will contact the appropriate agencies, as listed in Appendix G-4.

#### G -4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases (OAC 3745-54-56(E) & (F))

To prevent the recurrence or spread of fires, explosions, or releases, production operations will be shut down and waste will be contained until collected or isolated. Production buildings will be monitored to maintain their stability until production has received the word to re-start operations.

The facility has been designed with explosion proof production buildings which are well separated from one another so that a fire or explosion in one building does not immediately threaten another. Due to the reactive and explosive hazardous nature of the products manufactured at the facility, all operators are trained to stay in the control room if an explosion may occur in their building and only to leave when given clearance to do so.

#### G - 4 EMERGENCY RESPONSE PROCEDURES

United Initiators has developed response procedures for a variety of potentially dangerous situations, including fire or explosion, spill or release, natural disaster, or civil unrest. The response to each of these is addressed below.

##### G – 4a Notification (OAC 3745-54-56(A) and (D))

A major plant emergency may be declared in the event of a fire or explosion, spill or release, natural disaster, or civil unrest. It can be announced by sounding plant fire alarm, emergency evacuation siren, a verbal warning by public address system, two-way radios, telephone call, or as a direct order of the production supervisor. Furthermore, in the event of a major plant emergency, staff are directed to spread word of the alarm to co-workers (contract and maintenance personnel); evacuate the affected building or area (unless the employee has a specific emergency assignment); and evacuate all other buildings or areas (unless the employee has a specific emergency assignment).

Upon discovery of an emergency situation involving hazardous waste, the emergency coordinator, facility personnel, appropriate federal, state, and local agencies, and fire and police departments will be notified as appropriate. Appendix G-4 includes a list of outside individuals and companies which may provide assistance in the event of an emergency. This list is regularly maintained and updated to reflect current and accurate information.

Each time the contingency plan is implemented, details of the incident will be noted in the facility operating record. Within 15 days, United Initiators will provide written documentation to the Ohio EPA of any significant incident that requires implementation of this contingency plan that causes or may cause harm or hazard to human health and the environment on- or off-site.

In the event of a possible evacuation the emergency coordinator will immediately contact local authorities, and be available to help those officials decide whether evacuation is necessary.

Prior to resuming operations in the affected area(s) of the facility, the facility will notify the director of Ohio EPA and appropriate local authorities that the facility is in compliance with OAC 3745-54-56 (H).

In some cases, depending upon the building involved, instructions may be given to allow the fire to burn itself out. Firefighting will not be done if there is a significant risk of injury to the firefighters or persons in the immediate vicinity. The fire will be contained if possible. Since many raw materials used at the facility are flammable or combustible and all finished goods may be considered flammable and/or heat sensitive, any materials threatened by a fire will be removed from the area or wetted down with water to prevent ignition where it is safe to do so.

If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator will monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, as appropriate.

G – 4f Storage and Treatment of Released Material (OAC 3745-54-56(G))

Immediately after an emergency, the facility management will make arrangements for the treatment, storage or disposal of any recovered waste, contaminated soil, surface water, or other contaminated material. A supply of recovery drums is maintained to store contaminated material. The drums would be accumulated in the less than 90 day accumulation area, in accordance with the hazardous waste generator regulations.

United Initiators will manage these wastes as hazardous waste, except for any portion of the waste for which there is sufficient information to demonstrate that it is non-hazardous.

G – 4g Incompatible Waste (OAC 3745-54-56(H)(1))

The emergency coordinator ensures that, in the affected areas of the facility, no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.

G – 4h Post Emergency Equipment Maintenance (OAC 3745-54-56(H)(2))

After an emergency, all emergency equipment used during the emergency will be cleaned and made fit for use, or it will be replaced. Before operations are resumed, all emergency equipment in the area will be inspected to ensure it is fit for use. Equipment will be decontaminated as necessary before returning to service.

G – 4i Container Spills and Leakage (OAC 3745-54-52, 3745-54-56(G), 3745-55-71)

Spills or leaks from containers of hazardous wastes in the less than 90 day accumulation areas will be contained within the dikes and sumps at that area. Spills will be pumped into containers. United Initiators operates the less than 90 day accumulation areas in accordance with the maximum accumulation time allowed in the Large Quantity Generator (LQG) regulations, all containers will be removed within 90 days.

G – 4j Tank Spills and Leakage

United Initiators does not operate any permitted hazardous waste storage tanks at the Elyria, Ohio facility. The working tank is regulated and managed under the LQG requirements.

G-4k Surface Impoundment Spills and Leakage

United Initiators does not operate any hazardous waste surface impoundments at the Elyria, Ohio facility.

G-5 EMERGENCY EQUIPMENT (OAC 3745-54-52(E))

Appendix G-3 provides a list of all emergency equipment at the facility, including fire extinguishing systems, spill control equipment, communication and alarm systems (internal and external), and decontamination equipment. The locations of all equipment are included in this listing. This Contingency Plan will be updated regularly to reflect changes in the types and locations of emergency equipment used at the facility.

All offices, labs, and production buildings are protected by automatic sprinklers and/or deluge equipment, although certain portions of any building may not be sprinkled (i.e., electrical rooms). The fire department is notified automatically of any water flow in the sprinkler/deluge system.

Fire hydrants are located onsite at Building B-14 (north side, and in front of the building), Building B-4, between Building B-19 and B-20, and west of Building B-16. Two fire hydrants are located along Garden Street, outside the facility fence line. Monitors are located on the north side of Building B-14 and between Buildings B-19 and B-20.

Portable fire extinguishers carrying the A, B, C, rating are available throughout the facility. These extinguishers can handle small fires of combustible materials, flammable liquids and oils, and energized electrical equipment. Every office and production building contains at least one of these extinguishers.

A stock of extra extinguishers is maintained on-site to replace those that are used or lose their charge. All extinguishers are inspected monthly. Records of these inspections are kept by the facility.

Equipment used for containing and cleaning up spills of hazardous wastes are stored onsite.

First aid stations are maintained in several locations of the site. They are maintained by a third party service and inspected and replenished on a frequent basis.

Protective clothing and equipment is provided to protect employees during normal and emergency operations. Hard hats, safety glasses, steel toed shoes, and work uniforms are required at all times. Other protective equipment kept available on site at all times includes safety gloves (cloth and chemical resistant rubber, nitrile, and latex); face shields and extra splash goggles; and chemical suits.

#### G - 6 COORDINATION AGREEMENTS (OAC 3745-54-52(C), 3745-54-37)

United Initiators has made the following arrangements to assist in response to emergency situations.

The automatic alarm system is monitored 24 hours a day by a third party monitoring company. Notification to the Elyria Fire Department is made by the monitoring company. The master alarm control panel in the shift supervisor's office is used to initially identify the building where the trouble exists.

Copies of the Contingency Plan have been sent to the Elyria police and fire departments, the Lorain County LEPC, and UH Regional Medical Center. When more than one police and fire department may respond to an emergency, primary responsibility falls to the Elyria Fire Department.

Appendix G-4 identifies emergency response teams, contractors, and equipment suppliers with whom arrangements have been for responding at the United Initiators facility.

Arrangements have been made with the UH Regional Medical Center to familiarize them with the properties of hazardous waste handled at the United Initiators facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

#### G - 7 EVACUATION PLAN (OAC 3745-54-52(F))

An evacuation can be announced by the plant fire alarm or evacuation horn sounding, verbal announcement over the public address system, two-way radios, telephone call, or as a direct order of the shift supervisor. Employees are instructed to spread word of any alarm or evacuation order to co-

workers and visitors. Employees evacuate the affected building or area, unless assigned to a specific emergency activity.

Evacuation sirens are to be treated as the ultimate emergency warning, requiring evacuation of all personnel. The evacuation sirens are manually activated in the shift supervisor's office.

The primary evacuation assemble areas are listed below:

- Office Personnel - Visitor Lobby area, unless building # 2 is the affected area, then go to the northeast end of the main parking lot.
- Production Workers - Assemble near gate "A".
- Lab Personnel - Assemble near gate "B".
- Shipping and Receiving Personnel - Assemble near gate "B". They also have the responsibility to have any truck driver making deliveries to United assemble in this area.
- Maintenance Personnel - Assemble in front of B30.
- Building # 30 Office Workers - Assemble in front of B30.
- All Outside Contractors – Assemble in front of B30.

If an individual cannot get to their primary evacuation area, they are to report to any evacuation area and inform the person taking the headcount at that area. If it is not safe to come to any of the evacuation areas, employees will proceed to the back gate and will notify their supervisor(s) by radio, including the names of all individuals at the back gate.

#### G - 8 REQUIRED REPORTS (OAC 3745054-56(J))

Any emergency event that requires implementing the hazardous waste contingency plan will be noted in the operating record and reported in writing within 15 days to the Director of the Ohio EPA - Northeast District and to the U.S. EPA Region V Administrator. This report will include the following information:

1. Name, address, and telephone number of the owner or operator;
2. Name, address, and telephone number of the facility;
3. Date, time and type of incident;
4. Name and quantity of material(s) involved;
5. Extent of any injuries;
6. Assessment of actual or potential hazards to human health or the environment;
7. Estimated quantity and disposition of recovered material that resulted from the incident; and
8. Other information as may be required by the director.



G – 9 COPIES OF THE CONTINGENCY PLAN (OAC 3745-54-53)

A copy of the hazardous waste Contingency Plan is maintained at the facility administrative office, with the facility's Disaster and Emergency Manual. Copies of the Contingency Plan have been sent to the Elyria police and fire departments, the Lorain County LEPC, and UH Regional Medical Center.

G – 10 AMENDMENT OF THE CONTINGENCY PLAN (OAC 3745-54-54)

The contingency plan will be reviewed and immediately amended, as necessary whenever

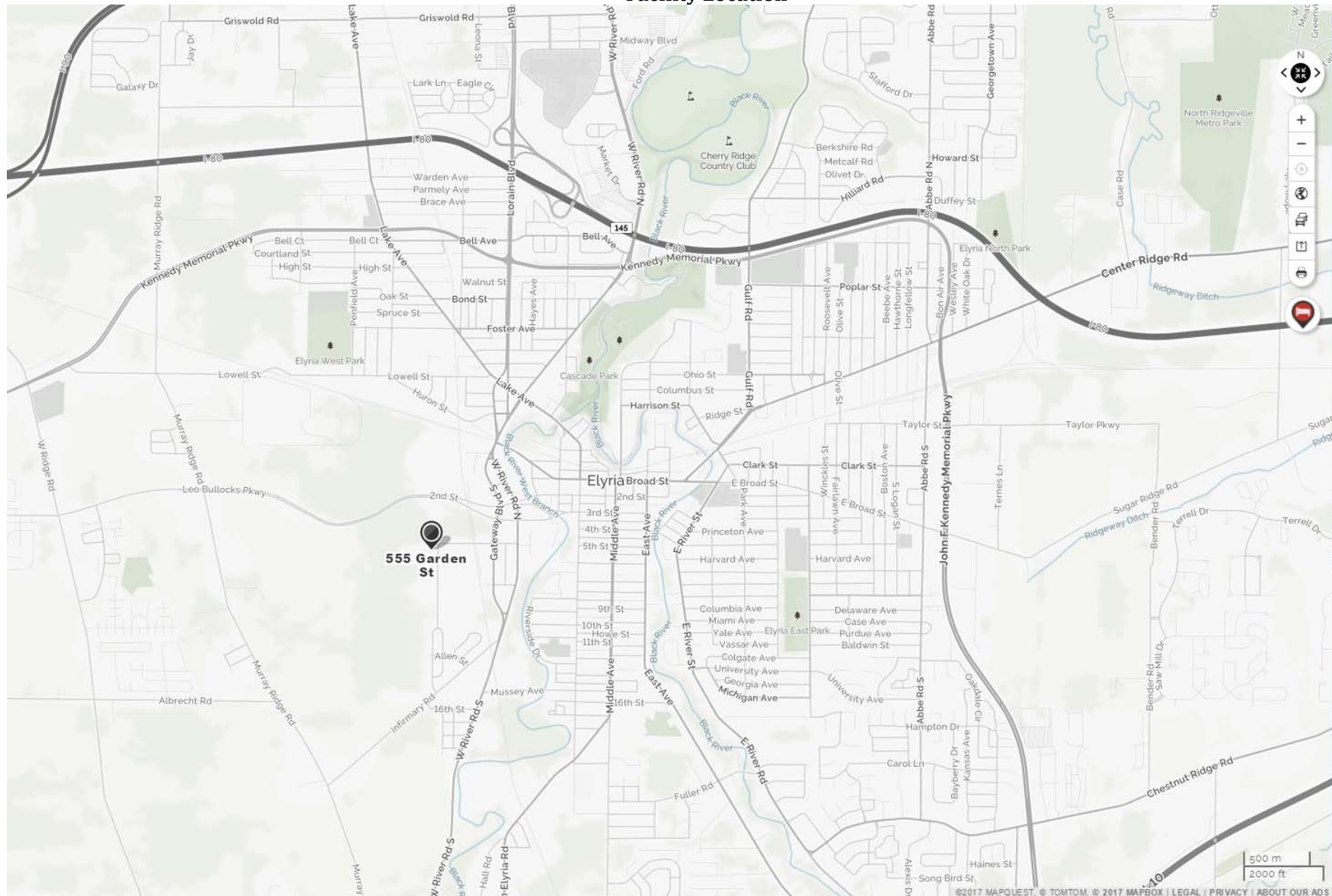
1. The facility permit is revised;
2. The plan has failed in an emergency;
3. The facility changes design, construction, operation, maintenance or other circumstances in such a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes in the response necessary in any emergency;
4. The list of emergency coordinators changes;
5. The list of emergency equipment changes; or
6. When a change is required by the Director of Ohio EPA.

This contingency plan has been designed to supplement the United Initiators' existing Disaster and Emergency Manual, which addresses a broader range of issues than are regulated under the RCRA hazardous waste operating permit.

# **Appendix G-1**

## **Facility Location Map**

### Facility Location



## **Appendix G-2**

### **Emergency Coordinators**

### EMERGENCY COORDINATORS

Following is a list of the plant employees who may serve as emergency coordinators for the United Initiators Elyria facility.

Mark Mroz, Site Manager Address:  Phone Numbers: Office: Cell:	Jeffrey Lenchak, EHSS&R Manager Address:  Phone Numbers: Office: Cell:
Frank Renaldo, Production Superintendent Address:  Phone Numbers: Office: Cell:	

Primary Emergency Coordinator Contact: Mark Mroz, Site Manager

Secondary Emergency Coordinator Contact: Jeff Lenchak, EHSS&R Manager

Third Emergency Coordinator Contact: Frank Renaldo, Production Superintendent

## **Appendix G-3**

### **Emergency Equipment**

**List of Emergency Response Equipment – Hazardous Waste Operations  
United Initiators, Elyria, Ohio Facility**

Category	Item	Location
Plans	Copy of Contingency Plan	Administration Building
	Utility Maps and Aerial Photographs	
	Affected neighbors maps and aerial photographs	
Communication Equipment	Telephones	Throughout Plant
	2-way radios	
	Fire Alarm & Evacuation Horn	
Fire Suppression and Lighting	Fire Extinguishers (ABC)	Throughout Plant
	Sprinkler / Deluge System	Throughout Plant
	Hydrants	South of B04 North of B14 West of B16 Between B19 & B20 2 hydrants on Garden Street
	Fire Hose	B14 B04
	Fire Blanket	Outside Quality Control Lab
	Emergency Lights	Throughout Plant
Spill Control & Containment	Non-sparking tools (shovels, brooms, rakes)	Throughout Plant Spill Kit B4
	Bulk absorbent pads, socks, booms, rolls	
	Loose absorbent (oil dry, vermiculite)	
	Recovery drums	
	Portable Pumps	
PPE & Air Monitors	Half face and full face respirators	Throughout Plant
	Organic Vapor and Acid Gas Cartridges	
	Face shields	
	Splash goggles	
	Rubber and cloth gloves	
	Chemical Suits	
	Rain coats	
	Hard hats	
First Aid	Eyewash Fountains	B4 & West of B4 by T7
	Safety showers	B4 & West of B4 by T7
	First aid supplies	First aid station

## **Appendix G-4**

### **Outside Emergency Contacts**



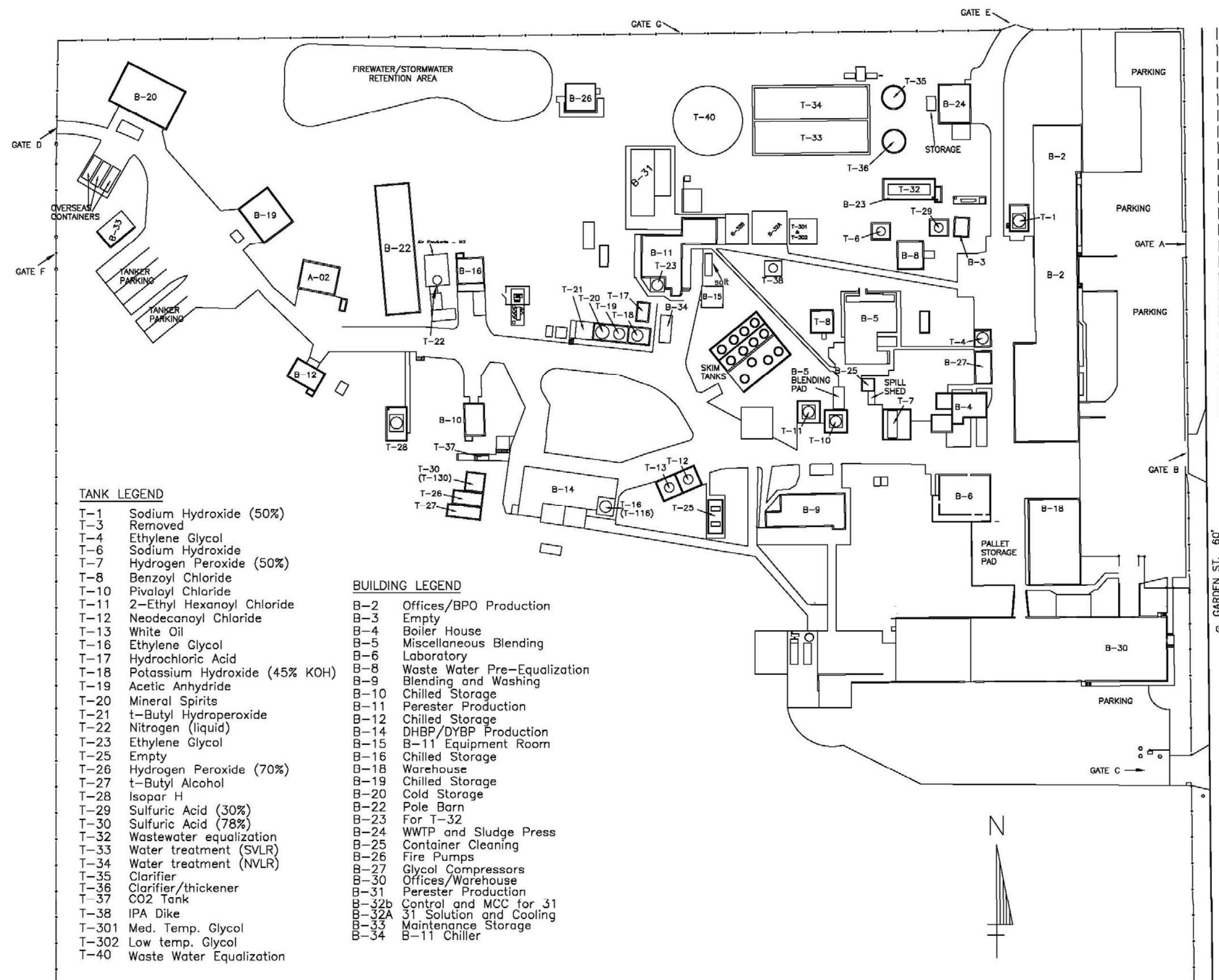
## **EMERGENCY CONTACT LIST FOR OUTSIDE ASSISTANCE**

<b>Organization</b>	<b>Services Provided</b>	<b>Phone Number</b>
Elyria Fire Department	Fire and Emergency Response	(440) 322-4170 / 911
Elyria Police Department	Emergency Services	(440) 323-3302 / 911
UH Elyria Regional Medical Hospital	Medical Treatment	(440) 329-7500 / 911
Lorain County Emergency Management	Emergency Response	(440) 329-5117
Ohio EPA Emergency Response	Emergency Response	(800) 282-9378
OSHA (Toledo, Ohio)	Safety and Health	(419) 259-7542
National Response Center	Emergency Response	(800) 424-8802
Chemtrec	Emergency Response Information	(800) 424-9300
Lorain County Sheriff's Department	Emergency Services	(440) 329-3709 / 911
Chemtron	Spill response and remediation	(440) 933-6000
Enviroserve	Spill response and remediation	(216) 642-1311

## **Appendix G-5**

### **Facility Map**

#### **Site Plan-Building & Vessel Identification – Issue 13**



#### TANK LEGEND

T-1	Sodium Hydroxide (50%)
T-3	Removed
T-4	Ethylene Glycol
T-6	Sodium Hydroxide
T-7	Hydrogen Peroxide (50%)
T-8	Benzoyl Chloride
T-10	Pivaloyl Chloride
T-11	2-Ethyl Hexanoyl Chloride
T-12	Neodecanoyl Chloride
T-13	White Oil
T-16	Ethylene Glycol
T-17	Hydrochloric Acid
T-18	Potassium Hydroxide (45% KOH)
T-19	Acetic Anhydride
T-20	Mineral Spirits
T-21	t-Butyl Hydroperoxide
T-22	Nitrogen (liquid)
T-23	Ethylene Glycol
T-25	Empty
T-26	Hydrogen Peroxide (70%)
T-27	t-Butyl Alcohol
T-28	Isopar H
T-29	Sulfuric Acid (30%)
T-30	Sulfuric Acid (78%)
T-32	Wastewater equalization
T-33	Water treatment (SVLR)
T-34	Water treatment (NVLK)
T-35	Clarifier
T-36	Clarifier/thickener
T-37	CO2 Tank
T-38	IPA Dike
T-301	Med. Temp. Glycol
T-302	Low temp. Glycol
T-40	Waste Water Equalization

#### BUILDING LEGEND

B-2	Offices/BPO Production
B-3	Empty
B-4	Boiler House
B-5	Miscellaneous Blending
B-6	Laboratory
B-8	Waste Water Pre-Equalization
B-9	Blending and Washing
B-10	Chilled Storage
B-11	Perester Production
B-12	Chilled Storage
B-14	DHBP/DYBP Production
B-15	B-11 Equipment Room
B-16	Chilled Storage
B-18	Warehouse
B-19	Chilled Storage
B-20	Cold Storage
B-22	Pole Barn
B-23	For T-32
B-24	WWTP and Sludge Press
B-25	Container Cleaning
B-26	Fire Pumps
B-27	Glycol Compressors
B-30	Offices/Warehouse
B-31	Perester Production
B-32b	Control and MCC for 31
B-32A	31 Solution and Cooling
B-33	Maintenance Storage
B-34	B-11 Chiller

13	2/27/17	Revised Revision Table and Study Data File	JAK						
12	09/18/16	Revised Legend, added data 6	JAK						
11	10/22/15	Added B-34 and modified T-13	JAK						
10	10/17/15	Modify B-34 to B-30 Plant	MEM						
9	5/15/12	ADD COMP. FUEL & T-10 Piping	MEM						
8	12/17/10	REMOVED T-1	DMW						
7	12/23/09	REMOVED TRUCK SCALE/SHED. HAZ. STOR.	DMW						
6	4/22/09	T-38 ADDITION	DMW						
5	5/6/05	B-31 Addition	DMW						
4	9/11/02		DMW						
3	8/6/01		DMW						
2	2/11/98		DMW						
1	10/23/97	FOR ISSUE	DMW						
ISS	DATE	DESCRIPTION OF REVISION	BY (CHKD)	BY (CHKD)	BY (CHKD)	BY (CHKD)	BY (CHKD)	BY (CHKD)	BY (CHKD)

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UNITED INITIATORS INC		
LOCATION 555 GARDEN ST. ELYRIA, OHIO 44035		
TITLE United Initiators Inc		
SITE PLAN - BUILDING & VESSEL IDENTIFICATION		
PROJECT No.	c:\drawings\site\plot\plot-001.dwg	
SCALE	DRAWING NUMBER	ISSUE
	PLOT-001	13

## **SECTION H**

### **PERSONNEL TRAINING**

The purpose of this section is to outline the manner in which United Initiators, Inc. provides initial and continuing training for employees whose duties require involvement with the hazardous waste management or combustion activities at the United Initiators Elyria facility. The training program provides these employees with the information necessary to perform their job in a safe and effective manner. This training program will be updated and revised as necessary. The information contained in this section outlines the personnel training program for the hazardous waste activities at United Initiators, Inc., in accordance with OAC 3745-54-16.

#### **H - 1 OUTLINE OF TRAINING PROGRAM**

Appendix H-1 includes an outline of the information covered in hazardous waste training at the United Initiators, Inc. Elyria facility. Additional information on the training program is provided in the following sections.

##### **H - 1a Job Titles and Duties**

Appendix H-2 lists the positions that may be involved in hazardous waste activities at the United Initiators, Inc. facility. This listing is maintained in the facility training record with up-to-date documentation of current employees holding each position.

The Site Manager and Environment, Health, Safety, Security, and Regulatory Manager (EHSS&R Manager) have overall responsibility for environmental management and compliance at the facility. The Waste Water Treatment Plant/Boiler Operator and specific production personnel are directly involved in the handling of hazardous waste. The Shipping and Receiving (S&R) personnel are occasionally involved in the movement of containers of waste for transportation off-site for disposal. The Laboratory Technicians are responsible for hazardous waste analytical activities, as well as proper management of laboratory-generated hazardous wastes.

Descriptions of the duties, responsibilities, and qualifications for each of these positions are provided in Appendix H-3. An individual may hold more than one position at the facility, in which case that employee will be trained on all applicable hazardous waste job responsibilities. If a position is vacant, another employee will assume the hazardous waste responsibilities of the vacant position, and will be so-noted in the listing of employees with hazardous waste responsibilities.

#### H -1b Training Content, Frequency, and Techniques (OAC 3745-54-16)

Employees responsible for hazardous waste management activities are required to successfully complete a classroom and on-the-job training program, which teaches them to perform their duties to ensure compliance with RCRA regulations. Completion of this program occurs within six months of a job assignment involving hazardous waste activities. No unsupervised work in these areas will be done unless the employee has successfully completed the training program. In addition to this training, these employees are trained in how to handle potential hazardous material emergencies. The Training Plan is reviewed, at minimum, on an annual basis.

Boiler operators receive extensive training through both on-the-job and classroom programs. Training on hazardous waste boiler operations are regulated and documented under the Hazardous Waste Combustor NESHAP (40 CFR 63 subpart EEE) Operator Training and Certification Plan.

Initial training generally includes a combination of classroom training, individual e-training (as needed), and on-the-job training. The classroom pieces of the training program utilize multiple delivery methods, including lectures, discussions, e-learning, and hands-on skills training. The e-learning portions of the training may include videos, slide presentations, on-line presentations, and/or interactive computer presentations. Because of the wide variety of affordable, high-quality training programs available on-line, United Initiators, Inc. is able to adjust and tailor pieces of the facility's hazardous waste training program on an as-needed basis, particularly those topics that are not site-specific. Although the sources of the individual training pieces may change, the required content does not. The EHSS&R Manager is responsible for ensuring that each employee receives adequate training on every topic identified in the outline in Appendix H-1.

During the training program, employees are educated about the following:

- hazardous waste personnel and responsibilities at the facility, including key personnel and where to get information at the facility;
- hazardous wastes regulations and other relevant regulations;
- site-specific hazardous waste operations, facility permit requirements, and the Part B permit application; and
- emergency response and contingency planning, including the individual's role and responsibilities in the event of an emergency situation.

After the classroom presentation, the facility is toured, with the appropriate areas and equipment identified and explained.

A detailed outline of the training program requirements is provided in Appendix H-1. This outline provides the framework for training United Initiators, Inc. personnel in the proper procedures, equipment, and systems to be used in managing hazardous wastes. On the job training is also utilized to place these guidelines into actual use and ensure that all employees understand their responsibilities. All training includes an emphasis on the individual's roles and responsibilities in ensuring compliance with the hazardous waste regulations, and in protecting health, safety, and the environment within the facility and the surrounding community.

Key personnel may be required to complete supplemental training (e.g., technical seminars or training programs) to enhance their knowledge. These additional training opportunities may be via live, in-person courses, seminars, and workshops; on-line real-time courses or webinars; or recorded courses and seminars. The selected method of training delivery will depend upon the available options at the time that the specific training is required. Completion of outside training activities will be documented in the employee's personnel file.

An annual review and update training session is required for each employee involved in hazardous waste management. In addition to reviewing/refreshing the subject matters from the initial training, this annual training also includes a status/progress evaluation of the facility's hazardous waste operations over the previous year. This will include review of the following:

- All presently handled wastes, noting any changes in waste type, volume, source, characteristics, or location that have occurred during the past year.
- Status of generator areas and permitted operating conditions and procedures, noting any areas where there are problems or potential for problems.
- Compliance status with respect to the RCRA Permit requirements, noting any changes that have occurred during the past year. Areas where maintenance of compliance is a problem are identified and discussed, and effective solutions are sought.
- Review of any events that activated the contingency plan and/or required emergency action. This review focuses on the cause of the incident and identification of steps needed to prevent future incidents or to ensure better handling of such events in the future.

H - 1c Training Director (OAC 3745-54-16(A)(2))

The hazardous waste personnel training program is directed by the EHSS&R Manager who has been formally trained in hazardous waste management procedures. Some components of the training may be conducted by other qualified plant personnel or third-party training professionals. Some components of the training program may be purchased from third party training developers.

H - 1d Relevance of Training to Job Position (OAC 3745-54-16)

Personal safety, spill release prevention and response, the contingency plan, emergency procedures, record keeping and hazardous waste handling are all portions of the training administered to the employees assigned to the positions identified in Appendix H-2. The training program is outlined in Appendix H-1.

H - 1e Training for Emergency Response (OAC 3745-54-16)

This training program is designed to ensure that personnel handle hazardous wastes in a safe manner during normal operations, and are also properly trained to respond to emergency situations. Plant personnel are trained to maintain compliance under both normal operating conditions and emergency conditions.

Elements of the Emergency Procedures training address non-routine and emergency situations, such as unscheduled shutdowns and startups (e.g., related to storms and power outages), fires, explosions, and spills. The Emergency Procedures training elements include:

- Procedures for locating, using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Emergency communication procedures and alarm systems
- Response to fire and explosions
- Shutdown of operations and power failure procedures
- Procedures for containing, controlling, and mitigating spills
- Procedures for evacuation

Specific information for these training elements will be drawn from the United Initiators, Inc. Disaster and Emergency Plans and Procedures and the United Initiators, Inc. Contingency Plan for Hazardous wastes (Section G of this RCRA Part B permit application).

All employees involved in hazardous waste management activities are required to participate in annual exercises conducted that will provide an opportunity for each person to participate in a simulated emergency response. Participation will be documented and included in the training record

## H - 2 IMPLEMENTATION OF TRAINING PROGRAM

As of the date of this submittal, all facility personnel responsible for hazardous waste operations have been trained in accordance with this training program. All personnel who are newly responsible for hazardous waste operations will complete this training program within 6 months of their start of employment. No employee hired to work at this facility will work unsupervised prior to the completion of the applicable training program.

All employees are required to meet annually for review and update of this training program, as discussed in Section H-1b above.

Records documenting the job title for each position, job descriptions, names of employees, and completed training programs (both introductory and review) will be kept onsite at United Initiators, Inc. Electronically maintained records can be accessed at the facility. Training records will be kept until closure of the facility for current employees and for 3 years from the date of the individual employee's termination for former employees.



# **Appendix H-1**

## **Training Program Outline**

## **Outline of Hazardous Waste Training Program**

- 1) Overview
  - a) Identification of various key personnel in the program
    - i) Contact information
    - ii) Emergency telephone numbers
  - b) Responsibilities for training, regulatory affairs, and emergency response.
  - c) Importance of hazardous waste responsibilities
  - d) Criteria for identifying hazardous waste operators to be trained and hazardous waste work areas
- 2) Introduction to hazardous waste and overview of regulations
  - a) Identification of hazardous waste
  - b) Hazardous waste generator requirements
  - c) Hazardous waste transporter requirements
  - d) Hazardous waste treatment, storage, and disposal facility requirements
  - e) Other applicable regulations
- 3) Hazardous waste operations at the United Initiators facility
  - a) Regulated hazardous waste activities and areas at the United Initiators, Inc. facility, including why they are regulated (to protect human health and the environment), and what equipment is involved in managing the wastes
    - i) Hazardous waste streams at United Initiators, Inc.
      - (1) Description of waste streams
      - (2) Sources and locations of hazardous waste generation
      - (3) Health and safety risks associated with these waste streams
      - (4) Handling, shipping, and ultimate disposal requirements
    - ii) Generator areas
      - (1) Points of generation
      - (2) Satellite accumulation
      - (3) Less than 90 accumulation

- (4) Movement of hazardous waste on-site
    - iii) TSDF areas
      - (1) Boiler 2
- b) United Initiators, Inc. RCRA Permit and associated Part B permit application
  - i) Overview of permit requirements and key plans from the application
  - ii) Waste analysis
  - iii) Hazard prevention, security, and inspections
  - iv) Release prevention and response
  - v) Closure Plan
  - vi) Hazardous waste boiler operations
    - (1) Resource Conservation and Recovery Act (RCRA) permit requirements
    - (2) Clean Air Act (CAA) permit requirements
  - vii) Recordkeeping, reporting, and manifests
  - viii) Waste minimization
- 4) Emergency Response and Contingency Plan Training (for non-routine and emergency situations)
  - a) Introduction to United Initiators, Inc. Disaster and Emergency Plans, and Contingency Plan
  - b) General emergency procedures: types of emergencies and response
  - c) Personal safety and personal protective equipment
  - d) Procedures for locating, using, inspecting, repairing, and replacing facility emergency and monitoring equipment
  - e) Emergency communication procedures and alarm systems
  - f) Response to fire and explosions
  - g) Shutdown of operations and power failure procedures
  - h) Procedures for containing, controlling, and mitigating spills
  - i) Procedures for evacuation
- 5) Facility tour

## **Appendix H-2**

### **Positions Performing Hazardous Waste Duties**

## Positions Performing Hazardous Waste Duties

Job Title
Site Manager
Production Superintendent
Environmental, Health, Safety, Security & Regulatory Manager
WWTP/Boiler Operator
Shipping and Receiving Worker
Shift Supervisor
Assistant Shift Supervisor
Laboratory Technician

## **Appendix H-3**

### **Job Descriptions**

**POSITION TITLE:      SITE MANAGER**

Position Responsibilities and Duties for hazardous Wastes:

- Overall responsibility for site operations
- Acts as primary Emergency Coordinator

Required Experience and Qualifications

- 3 years' experience in plant operations
- Hazardous waste management experience helpful but not required

**POSITION TITLE:      PRODUCTION SUPERINTENDENT**

Position Responsibilities and Duties for Hazardous Waste

- Emergency Coordinator

Required Experience and Qualifications

- 3 years' experience in plant operations
- Hazardous waste management experience helpful but not required

**POSITION TITLE: ENVIRONMENTAL, HEALTH, SAFETY, SECURITY & REGULATORY MANAGER**

Position Responsibilities and Duties for Hazardous Waste:

- Emergency Coordinator
- Provide technical and regulatory expertise related to hazardous waste activities
- Oversees Training of plant personnel in area of hazardous waste activities
- Obtains all required permits and license or modifications from local, state, and federal authorities and completes all required reporting
- Acts as a consultant to Site Manager during emergency situations
- Management of hazardous waste
- Prepares shipments and coordinates off-site disposal and responsible for management of hazardous waste manifests
- Completes routine inspections as required by Section F

Required Experience and Qualifications:

- B.S. in Chemistry, Chemical Engineering, or related field
- 3 years' experience in plant operations

**POSITION TITLE: WWTP/BOILER OPERATOR**

Position Responsibilities and Duties for Hazardous Wastes:

- Proper operation of boiler system and incineration of hazardous waste
- Completes routine inspections for boiler system and hazardous waste management areas as required by Section F
- Management of hazardous waste
- Assists in the preparation of hazardous waste for transport
- Spill cleanup operations

Required Experience and Qualifications:

- High School Diploma
- Hazardous Waste Combustor NESHP (40 CFR 63 subpart EEE)
- DOT Hazardous Materials Training



**POSITION TITLE: SHIPPING & RECEIVING WORKER**

Position Responsibilities and Duties for Hazardous Wastes:

- Movement of wastes via forklift
- Preparation of hazardous waste for transport as instructed by EHSS&R Manager
- Spill cleanup operations

Required Experience and Qualifications:

- High School Diploma
- 1 year experience in plant operations
- DOT Hazardous Materials Training

**POSITION TITLE: SHIFT SUPERVISOR**

Position Responsibilities and Duties for Hazardous waste:

- Reports to Production Superintendent
- Oversee boiler operation on off shifts
- Management of hazardous waste from skim tanks
- Oversee production operations on a shift basis and report any environmental problems or emergency situations to his supervisor
- Takes emergency action on own authority in accordance with established procedures to prevent damage to facility, human health, or the environment
- Spill cleanup operations

Required Experience & Qualifications:

- High School Diploma
- 3 years experience in plant operations

**POSITION TITLE: ASSISTANT SHIFT SUPERVISOR**

Position Responsibilities and Duties for Hazardous waste:

- Operate the boiler on off shifts
- Management of hazardous waste from skim tanks
- Notify Supervision of situations that may develop during normal plant operations which may endanger human health, the environment or the facility
- Spill cleanup operations

Required Experience & Qualifications:

- High School Diploma
- 1 year experience in plant operations

**POSITION TITLE: LABORATORY TECHNICIAN**

Position Responsibilities and Duties for Hazardous Wastes:

- Analyzes basic chemical properties for hazardous waste (i.e. active oxygen content)

Required Experience & Qualifications:

- High School chemistry
- Experience in laboratory or chemicals manufacturing

## **SECTION I**

### **CLOSURE, POST-CLOSURE, AND FINANCIAL REQUIREMENTS**

This section presents a closure plan for the permitted RCRA hazardous waste activities at the United Initiators Elyria, Ohio facility. United Initiators, Inc. is located within the city limits of Elyria, Ohio. This facility is a manufacturer of organic peroxides in solid and liquid form. These materials can possess several hazardous characteristics, including flammability, shock sensitivity, and temperature sensitivity. Hazardous wastes are created during the production of these materials primarily from purification processes and from cleaning of production tanks and lines between product runs.

Descriptions of the closure activities for the facility along with the mechanisms utilized in meeting the financial requirements are provided.

#### **I – 1 CLOSURE PLAN**

##### **I – 1a Closure Performance Standard (OAC 3745-55-11)**

United Initiators will close this facility in a manner that will minimize the need for further maintenance. United Initiators will close this facility to control, minimize or eliminate, to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous waste decomposition products to the ground or surface water or the atmosphere; and will comply with the closure requirements of OAC rules 3745-55-10 to 3745-55-20 including, but not limited to, the applicable requirements of OAC rules 3745-55-78, 3745-55-97, 3745-56-28, 3745-56-58, 3745-56-80, 3745-57-10, 3745-57-51, and 3745-57-91 to 3745-57-93.

##### **I – 1b Time and Activities Required for Partial Closure and Final Closure Activities (OAC 3745-55-13)**

This closure plan contains a description of the permitted hazardous waste management unit at the facility will be closed according to the closure performance standard; a description of how final closure will be conducted, including an estimate of the maximum extent of the operations which will not close during the active life of the facility; a description of the steps necessary to remove all hazardous waste, decontaminate the hazardous waste management unit or render them non-hazardous at closure, and demonstrate successful closure by removal of all hazardous

waste; a description of other activities necessary during closure to ensure that the closure performance standard is met; and an estimate of the expected final year of closure.

I – 1c Maximum Waste Inventory (OAC-3745-55-13)

United Initiators does not operate any permitted hazardous waste storage units, so there is no maximum permitted waste inventory in storage. Boiler 2 working tank (working tank) holds a maximum of 300 gallons of liquid hazardous waste, which carries the waste codes D001 and D003. The maximum amount of waste that is fed to the boiler is 8 gallons/hour.

I – 1d Schedule for Closure (OAC 3745-55-13)

Because United Initiators is an ongoing operation, no expected year for closure has been established. When activities at the site are completed or when liquid hazardous waste fuels are no longer used in Boiler 2, United Initiators will adhere to the following schedule:

<b>Activity</b>	<b>Day</b>
Receipt of final waste volume to the hazardous waste treatment unit.	0
Complete removal, treatment, and/or disposal of waste inventory.	90
Complete decontamination of equipment and structures	120
Complete removal of equipment / structures, as necessary.	150
Complete removal of impacted soils, if necessary (note that an extension may be required if extensive soil removal is necessary).	170
Completion of all closure activities	180
Submittal of Closure Certification report to Ohio EPA Director	240

In the event that a longer time period for closure is necessary and the conditions described in OAC 3745-66-13(B) have been met, an extension will be requested as outlined in OAC 3745-66-13(B). This extension request will be submitted at least 30 days before the deadline date.

I - 1e Closure Procedures

One permitted hazardous waste management unit will be closed at United Initiators. The hazardous waste boiler (Boiler 2) is a 4.2 mmBtu/hr natural gas fired boiler supplemented by liquid hazardous waste fuel. Boiler 2, which is located in Building B-4, was originally installed in 1966, and in 2004 was issued a permit to upgrade the boiler to receive supplemental liquid waste fuels. The boiler is constructed of carbon steel lined with refractory. The fan, stack, flue gas piping, and combustion air piping are also carbon steel. Liquid fuel piping is Kynar PVDF. A schematic drawing for the boiler is shown in Appendix I-1 to this closure plan.

#### I – 1e (1) Inventory Removal

The boiler is designed to accept two types of feed materials: 100% natural gas; or a mixture of natural gas and liquid hazardous wastes. Liquid hazardous wastes are fed to the boiler from the working tank, which operates as a LQG (<90-day) accumulation tank. The working tank is a 300-gallon tank located in Building B-4 used to feed liquid waste to Boiler 2. Natural gas enters through a separate piping arrangement to the burner.

Any inventory remaining in the working tank will be combusted in Boiler 2. Alternately, the inventory may be shipment to an off-site treatment, storage, or disposal in a permitted facility. This material will be managed under the less than 90 day large quantity generator requirements. The working tank will be closed under generator requirements.

#### I-1e (2) Disposal or Decontamination of Equipment, Structure, and Soils

Boiler 2 and all ancillary piping and equipment will be decontaminated by water rinse or solvent rinsing. Solvent rinsate will be burned in the boiler during the flushing process. Rinsate water will be treated on site in the facilities wastewater treatment plant.

Decontaminated equipment will be reused by United Initiators, or sold for reuse or scrap to the maximum extent possible. Equipment expected to continue in service at the facility includes the boiler, working tank, piping, pump motors, and instrumentation.

The final rinsate will be collected separately and tested for ignitability and reactivity. If no hazardous characteristics are present, the rinsate will be disposed of in the wastewater treatment plant. If the rinsate is found to be hazardous or the treatment plant is not operating, it will be containerized and sent to an approved facility for treatment and disposal.

#### I-1e (3) Closure of Disposal Units/Contingent Closures (OAC 3745-56-28 and 58)

United Initiators does not operate any disposal units on-site that would require development of a contingent closure plan.

#### I-1e (4) Closure of Containers

There are no permitted hazardous waste container areas at the United Initiators facility. The previously permitted container storage areas were clean closed and have been removed from the site.

I-1e (5) Closure of Tanks

There are no permitted hazardous waste storage tanks at the United Initiators facility. The boiler working feed tank, which operates as a LQG (<90-day) accumulation tank will be closed under generator standards.

I-1e (6) Closure of Waste Piles

United Initiators does not operate any hazardous waste piles at the Elyria facility.

I-1e (7) Closure of Surface Impoundments

United Initiators does not operate any hazardous waste surface impoundments at the Elyria facility.

I-1e (8) Closure of Incinerators

United Initiators previously operated a hazardous waste incinerator at the Elyria facility. This incinerator has been closed, and was removed from the facility's RCRA permit as of October 22, 2008.

I-1e (9) Closure of Landfills

United Initiators does not operate any landfills at the Elyria facility.

I-1e (10) Closure of Land Treatment Facilities

United Initiators does not operate any land treatment units at the Elyria facility.

I-1e (11) Closure of Miscellaneous Units

United Initiators does not operate any hazardous waste miscellaneous units at the Elyria facility.

I-1e (12) Closure of Boilers and Industrial Furnaces

Boiler 2 can burn a mixture of hazardous waste and natural gas, or it can operate solely on natural gas. Closure of this unit will be accomplished by removal of all hazardous waste and waste residue so as to attain a "clean closure." The following items outline the closure procedures which will be followed during the boiler decontamination activities.

- The existing waste fuel inventory will be burned in Boiler 2, or will be shipped off site for treatment at a permitted facility.
- United Initiators will visually inspect the boiler building, and the exterior of the boiler for any evidence of past leakage. Any residues will be removed manually or by mechanical methods (e.g., sandblasting) and containerized for off-site disposal at a permitted facility.
- Waste fuel lines leading into the boilers will be flushed with solvent and the rinsate will be burned in the boiler or sent off site for treatment at a permitted facility.
- The boiler will be fired with virgin fuel (natural gas) for 24 hours at approximately 65% maximum feed rate.
- The boiler will be shut down and allowed to cool to facilitate any decontamination efforts.
- Any visible residue will be removed from the outside of the boiler or the concrete containment area, and containerized for off-site disposal to a permitted facility.

All equipment and structures which cannot be successfully decontaminated shall be disposed of as hazardous waste in permitted off-site facilities. Decontaminated structures may be returned to service or demolished down to the base pad. Decontaminated debris will be removed and disposed of as clean construction debris.

#### I-1e(13) Closure of Containment Buildings

United Initiators does not operate any hazardous waste containment buildings at the Elyria facility.

#### I-2 POST-CLOSURE PLANS

United Initiators does not operate any land disposal activities on-site and will perform a “clean closure” of the hazardous waste management units at the facility, eliminating the need for a Post-Closure Plan.

### I-3 NOTICES REQUIRED FOR DISPOSAL

#### I-3a Certification of Closure

Closure will be certified and documented by an independent registered professional engineer. The certification will attest that the permitted hazardous waste unit has been closed in accordance with the specifications in the approved Closure Plan.

The engineer certifying closure will observe typical procedures during closure to ensure that they meet the requirements of the approved Closure Plan. These include hazardous waste inventory removal, equipment decontamination, verification sampling, and removal of contaminated materials.

The engineer certifying closure will observe typical sampling conducted to verify clean closure, including chain-of-custody procedures. The engineer will review analytical data from the laboratory, including the results of quality control samples and calibrations, to determine if decontamination is successful.

The engineer will certify that closure is complete if all relevant procedures described in the approved Closure Plan have been followed. The engineer will document any deviations from the approved procedures, recommendations to correct deviations, and the results of corrective action.

#### I-3b Survey Plat

United Initiators does not operate any land disposal activities on-site and will perform a “clean closure” of the hazardous waste management units at the facility, eliminating the need for a survey plat showing the horizontal and vertical extent of any remaining wastes.

### I-4 CLOSURE COST ESTIMATE (OAC 3745-55-42)

The closure cost estimates outlined in Appendix I-1 equal the cost of final closure of the individual units at the point in plant operations when the extent and manner of the facility’s operations would make closure the most expensive. Closure costs have been developed for Boiler 2 and associated equipment and operations. The cost estimates are based upon hiring a third party (who is neither a parent nor a subsidiary of the owner or operator) to close the facility.



No salvage values from the sale of hazardous or non-hazardous wastes, facility structures or equipment, land or other assets associated with the facility at the time of partial or final closure are included. No zero costs for hazardous wastes have been incorporated.

The closure costs will be adjusted for inflation annually as required at OAC 3745-55-12(B) to account for inflation by using an inflation factor derived from the annual Implicit Price Deflector for Gross National Product, published by the U.S. Department of Commerce.

#### I-5 FINANCIAL ASSURANCE FOR CLOSURE

The documentation demonstrating financial assurance for closure of the United Initiators facility is provided in Appendix I-2.

#### I-6 POST-CLOSURE COST ESTIMATE

The United Initiators Elyria, Ohio facility will be clean closed by removing all hazardous waste and contaminated equipment, structures and soils to the extent that an unacceptable risk to human health or the environment is determined to remain at the facility from hazardous waste constituents in the permitted areas described in this closure plan. Following this closure, no hazardous waste will be treated, stored, or disposed of at the facility. Therefore, RCRA post-closure requirements and cost estimates will not be applicable to this facility.

#### I-7 FINANCIAL ASSURANCE MECHANISM FOR POST CLOSURE CARE

Post-closure financial assurance is not required for the United Initiators facility.

#### I-8 LIABILITY REQUIREMENTS

The documentation demonstrating closure insurance liability coverage for the United Initiators facility is provided in Appendix I-3.

# **Appendix I-1**

## **Closure Cost Estimate**

## FACILITY SUMMARY

Unit	Worksheet Reference	Cost to Close
Container Storage Areas	CS-1	0.00
Tank and Boiler Systems	TS-1	22,882.99
User Defined Costs (Boiler)	UD-1	418.00
<b>Total Contingency Cost Estimate (2009 \$\$)</b>		<b>23,300.99</b>

*Inflation adjustment:*

*Implicit Price Deflator 1Q2017 = 112.768*

*Implicit Price Deflator 2009 = 100.062*

*Quotient = 110.662/100.062 = 1.1270*

Inflation adjusted cost estimate in current dollars = 23,300.99 X 1.1270 = **\$26,260.22**

**TS-1:TANK AND BOILER SYSTEMS  
SUMMARY WORKSHEET**

	.		Worksheet Number	Cost	
	1	Removal of Waste	TS-3	260.34	\$
	2	Tank System Purging (ignitable wastes only)	TS-4	0.00	\$
	3	Flushing the Tank and Piping	TS-5	269.43	\$
	4	Disassembly and Loading	TS-6	1,732.67	\$
	5	Demolition and Removal of Containment System	TS-7	0.00	\$
	6	Removal of Soil	TS-8	0.00	\$
	7	Backfill	TS-9	0.00	\$
	8	Decontamination	TS-10	271.84	\$
	9	Sampling and Analysis	TS-11	1,591.01	\$
	10	Transportation	TS-12	0.00	\$
	11	Treatment and Disposal	TS-13	1,736.32	\$
	12	Subtotal of Closure Costs (Add lines 1 through 11)		5,861.60	\$
	13	Engineering Expenses (approximately 10% of closure costs, excluding certification of closure [Multiply line 12 by 0.10])		586.16	\$
	14	General Conditions (incl. personal protective equipment, labor supervision, insurance, temporary facilities, etc.) Approximately 10% of closure costs, excluding certification of closure. [multiply line 12 by 0.10]		586.16	
	15	Certification of Closure	TS-14	12,035.24	\$
	16	Subtotal (add engineering expenses and costs of certification of closure to closure costs) (Add lines 12, 13,14 and 15)		19,069.16	\$
	17	Contingency Allowance (approximately 20% of closure costs, engineering expenses, and costs of certification of closure) (Multiply line 16 by 0.20)		3,813.83	\$
	TANK SYSTEMS: TOTAL COST OF CLOSURE (add lines 16 and 17)			22,882.99	\$

## TS-2:TANK AND PIPING SYSTEMS INVENTORY

<b>1</b>	<b>UNIT DESCRIPTION AND MAXIMUM CAPACITY</b>			
	Describe the unit to determine the cost of the activities to be conducted to close			
1.A	Type of system (aboveground or on-ground)	above ground		
1.B	Maximum capacity of all tanks subject to closure	0	gal	
1.C	Total length of ancillary piping	100.00	ft	
1.D	Maximum capacity of ancillary piping (Refer to the table at the bottom of this worksheet for guidance on estimating the capacity of ancillary piping)	4.00	gal	
1.E	Maximum capacity of tank and ancillary piping (Add lines 1.B and 1.D)	4.00	gal	
1.F	Type of secondary containment system	Vault Lined containment system (external to tank)		
	If 1.F is Other Explain			
<b>2</b>	<b>INTERIOR SURFACE AREA OF TANK SYSTEMS</b>			
	Determine the interior surface area of all tank systems subject to closure to determine costs of decontamination.			
2.A	Interior surface area of tank (Refer to the table at the bottom of this worksheet for guidance on estimating the interior surface area of a tank.)	0	ft2	
2.B	Ancillary piping (Refer to Page 5 of 5 of this worksheet for guidance on estimating the interior surface area of ancillary piping.)	27.40	ft2	
2.C	Surface Area of Tank Systems (Add lines 2.A and 2.B)		27.40	ft2
2.D	Surface Area of Tank Systems in yd2 (Divide line 2.C by 9)		3.04	yd 2
<b>3</b>	<b>SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM PAD</b>			
	Determine the surface area of the secondary containment system pad to calculate costs for decontaminating or demolishing the pad at the time of closure.			



3.A	Length		ft	
3.B	Width		ft	
3.C	Surface Area of Secondary Containment System Pad (Multiply line 3.A by line 3.B)	0.00	ft2	
3.D	Surface Area of Secondary Containment System Pad in yd2 (Divide line 3.C by 9)	0.00	yd2	
<b>4</b>	<b>VOLUME OF SECONDARY CONTAINMENT SYSTEM PAD</b>			
	Calculate the volume of the secondary containment system pad to determine the cost of removing the pad. Removal of the secondary containment system pad is an activity that might be conducted at the time of closure.			
4.A	Thickness		ft	
4.B	Thickness in yards (Divide line 4.A by 3)	0.00	yd	
4.C	Volume of Secondary Containment System Pad in yd3 (Multiply line 3.D by line 4.B)	0.00	yd 3	
<b>5</b>	<b>SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM BERM</b>			
	Calculate the interior surface area of the secondary containment system berm, or curbing, to determine the cost of decontaminating and demolishing the berm at the time of closure.			
5.A	Length		ft	
5.B	Height		ft	
5.C	Surface Area of Secondary Containment System Berm (Multiply line 5.A by line 5.B)	0.00	ft2	
5.D	Surface Area of Secondary Containment System Berm in yd2 (Divide line 5.C by 9)	0.00	yd2	
<b>6</b>	<b>VOLUME OF SECONDARY CONTAINMENT SYSTEM BERM</b>			
	Calculate the volume of the secondary containment system berm, or curbing, to determine the cost of removing the berm. Removal of the secondary containment system berm is an activity that might be conducted at the time of closure.			
6.A	Thickness		ft	
6.B	Thickness in yards (Divide line 6.A by 3)	0.00	yd	
6.C	Volume of Secondary Containment System Berm in yd3 (Multiply line 5.D by line 6.B)	0.00	yd3	
<b>7.A</b>	<b>SURFACE AREA OF OTHER STRUCTURES IN SECONDARY CONTAINMENT SYSTEM (specify by name)</b>			

	Calculate the surface area of all additional structures that are part of the secondary containment system at the unit that will be decontaminated or demolished at the time of closure (for example, load/unload pads, ramps or sumps).		
1	Surface Area of Other Structures		ft2
	Specify name of Area	sump	
2	Surface Area of Other Structures in yd2 (Divide line 7.A by 9)	0.00	yd 2
<b>8.A</b>	<b>VOLUME OF OTHER STRUCTURES IN SECONDARY CONTAINMENT SYSTEM</b>		
	Calculate the volume of all additional structures that are part of the secondary containment system at the unit to determine costs of removing those structures. Removal of other structures is an activity that might be conducted at the time of closure.		
1	Volume of Other Structures		yd3
<b>7.B</b>	<b>SURFACE AREA OF OTHER STRUCTURES IN SECONDARY CONTAINMENT SYSTEM (specify by name)</b>		
	Calculate the surface area of all additional structures that are part of the secondary containment system at the unit that will be decontaminated or demolished at the time of closure (for example, load/unload pads, ramps or sumps).		
1	Surface Area of Other Structures		ft2
	Specify name of Area		
2	Surface Area of Other Structures in yd2 (Divide line 7.A by 9)	0.00	yd 2
<b>8.B</b>	<b>VOLUME OF OTHER STRUCTURES IN SECONDARY CONTAINMENT SYSTEM</b>		
	Calculate the volume of all additional structures that are part of the secondary containment system at the unit to determine costs of removing those structures. Removal of other structures is an activity that might be conducted at the time of closure.		
1	Volume of Other Structures		yd3

<b>9</b>	<b>VOLUME OF CONTAMINATED SOIL TO BE REMOVED</b>			
	Calculate the volume of contaminated soil to be removed. Removal of contaminated soil is an activity that might be conducted at the time of closure.			
9.A	Length		ft	
9.B	Width		ft	
9.C	Depth		ft	
9.D	Volume of Contaminated Soil to be Removed (Multiply line 9.A by line 9.B by line 9.C)		0.00	ft3
9.E	Volume of Contaminated Soil to be Removed in yd3 (Divide line 9.D by 27)		0.00	yd3

**TS-3:TANK AND BOILER SYSTEM  
REMOVAL OF WASTE**

1	Maximum volume of waste to be removed from the tank and ancillary piping (Enter from worksheet TS-2, line 1.E)	4.00	gal	
2	Level of PPE assumed for this activity (protection level D, C, or B)	C	level of PPE	
<u>3</u>	Labor and equipment cost per work hour	260.68	\$	
<u>4</u>	Work rate required to remove waste from tank and ancillary piping c	0.000330	work hr/gal	
5	Number of hours required to remove waste from tank and ancillary piping (Multiply line 1 by line 4) (One hour minimum; round up to the half-hour)	0.00	work hrs	
UD	Correction to reflect actual expected labor	260.00	\$	
<b>TOTAL COST OF REMOVAL OF WASTE FROM TANK AND ANCILLARY PIPING (Multiply line 3 by line 5) (Enter total on Worksheet TS-1, line 1)</b>			260.34	\$

## TS-5:TANK SYSTEMS

### FLUSHING THE TANK AND PIPING

Complete this worksheet only for tank systems that will be flushed.

1	Maximum capacity of the tank and ancillary piping (Multiply Worksheet TS-2, line 2.C by 4)	109.60	gal	
2	Number of times tank and ancillary piping will be flushed (if unknown, assume 1)	1		
3	Total volume of flushing solution (Multiply line 1 by line 2)	109.60	gal	
4	Level of PPE assumed for this activity (protection level D, C, or B)	C	level of PPE	
5	Labor and equipment cost per work hour	260.68	\$	
6	Work rate required to flush tank and ancillary piping	0.000330	work hr/gal	
7	Number of hours required to flush tank and ancillary piping (Multiply line 3 by line 6) (One hour minimum; round up to the half-hour)	0.04	work hrs	
8	Subtotal of labor and equipment costs to flush tank and ancillary piping (Multiply line 5 by line 7)	9.43	\$	
9	Total volume of flushing solution (Enter from line 3). (The flushing solution generated may be disposed of in drums or as bulk liquid. If the volume is too large to be handled effectively by placement in drums, use worksheet TS-13B (for water-based flushing solution) or TS-12 and TS-13A (for a solvent solution) to calculate the transportation, treatment, and disposal cost. If the flushing solution is to be placed in drums, complete lines 10 through 12.)	109.60	gal	
	Check this box if you plan on disposing of the flushing solution as bulk liquid	<input checked="" type="checkbox"/>	If you check this box, calculate the treatment and disposal costs in Sheet TS-13B	
10	Number of drums required to contain flushing solution (Divide line 9 by 55 gallons per drum; round up to the nearest whole number)	2.00	drums	
11	Cost of one drum	263.50	\$/drum	
12	Cost of drums needed to contain flushing solution (Multiply line 10 by line 11)	0.00	\$	



United Initiators, Inc.  
Elyria, Ohio

RCRA Permit Application  
U.S. EPA ID No. OHD046202602

Revision 1  
December 2017

UD	Cost adjustment to reflect actual labor	260.00	\$
<b>TOTAL COST OF FLUSHING OF TANK AND ANCILLARY PIPING (Add lines 8 and 12) (Enter total on Worksheet TS-1, line 3)</b>		<b>269.43</b>	\$

## TS-6:TANK SYSTEMS

### DISASSEMBLY AND LOADING

<b>1</b>	<b>DISASSEMBLY OF ANCILLARY PIPING</b>		
1.A	Length of ancillary piping to be disassembled (Enter from worksheet TS-2, line 1.C)	100.00	ft
1.B	Level of PPE assumed for this activity (protection level D, C, or B) <i>b</i>	C	level of PPE
1.C	Labor and equipment cost per work hour <i>c</i>	115.51	\$
1.D	Work rate required to disassemble one ft of piped <i>d</i>	0.15	work hr/ft
1.E	Number of hours required to disassemble ancillary piping (Multiply line 1.A by line 1.D) (One hour minimum; round up to the half-hour)	15.00	work hrs
<b>1.F</b>	<b>Cost to Disassemble Ancillary Piping (Multiply line 1.C by line 1.E)</b>	<b>1,732.67</b>	<b>\$</b>
<b>2</b>	<b>LOADING</b>		
2.A	Capacity of tank (Enter from worksheet TS-2, line 1.B)	0.00	gal
2.B	Level of PPE assumed for this activity (protection level D, C, or B) <i>b</i>	C	level of PPE
2.C	Labor and equipment cost per work hour <i>e</i>	118.96	\$
2.D	Work rate required to load tank per gallon capacity <i>f</i>	0.00	work hr/ gal capacity
2.E	Number of hours required to load tank (Multiply line 2.A by line 2.D) (One hour minimum; round up to the half-hour)	0.00	work hrs
<b>2.F</b>	<b>Cost to Load Tank (Multiply line 2.C by line 2.E)</b>	<b>0.00</b>	<b>\$</b>
<b>UD</b>			<b>\$</b>
<b>TOTAL COST OF DISASSEMBLY AND LOADING (Add lines 1.F and 2.F) (Enter total on Worksheet TS-1, line 4)</b>		<b>1,732.67</b>	<b>\$</b>

**TS-10:TANK SYSTEM  
DECONTAMINATION SUMMARY**

DECONTAMINATION SUMMARY WORKSHEET						
Check boxes below to activate sheet		Activity	Worksheet Numbers	Cost (\$)		
	<input checked="" type="checkbox"/>	1	Decontamination of Unit by Steam Cleaning or Pressure Washing	TS-10A	73.01	\$
		2	Decontamination of Unit by Sandblasting/Scarification	TS-10B	0.00	\$
	<input checked="" type="checkbox"/>	3	Decontamination of Heavy Equipment	TS-10C	198.83	\$
	<b>TOTAL COST OF DECONTAMINATION (Add lines 1, 2, and 3) (Enter total on Worksheet TS-1, line 8)</b>				<b>271.84</b>	<b>\$</b>

# **TS-10A:TANK SYSTEM**

## **DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING**

1	Area of unit to be decontaminated (Enter from Worksheet TS-2; add lines 2.C, 3.C, 5.C, and 7.A.1 and 7.B.2)	27.4	ft2	
2	Level of PPE assumed for this activity (protection level D, C, or B) <i>a</i>	C	level of PPE	
3	Labor and equipment cost per work hour <i>b</i>	98.68	\$	
4	Work rate to steam clean or pressure wash one ft2 <i>c</i>	0.03	work hrs/ft 2	
5	Number of hours required to steam clean or pressure wash the unit (Multiply line 1 by line 4) (One hour minimum; round up to the half-hour)	0.74	work hrs	
6	Subtotal of labor and equipment cost to decontaminate the unit by steam cleaning or pressure washing (Multiply line 3 by line 5)		73.01	\$
7	Volume of decontamination fluid (Multiply line 1 by 4 gal/ft ) (The decontamination fluids 2d generated may be disposed of in drums or as bulk liquid. If the volume is too large to be handled effectively by placement in drums, use worksheet TS-13B to calculate the costs	109,60	gal	
	Check this box if you plan on disposing of the decontamination solution as bulk liquid	<input checked="" type="checkbox"/>	If you check this box, the treatment and disposal costs should be calculated in Sheet TS-13B	

8	Number of drums required to contain decontamination fluid for removal (Divide line 7 by 55 gallons per drum; round up to the nearest whole number)	1.99	drums	
9	Cost of one drum	263.50	\$ /drum	
10	Cost of drums needed to contain decontamination fluid (Multiply line 8 by line 9)	0.00	\$	
UD			\$	
<b>TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING (For bulk liquids, enter from line 6. For liquids in drums, add lines 6 and 10.) (Enter total on Worksheet TS-10, line 1)</b>			<b>73.01</b>	<b>\$</b>



**TS-10C:TANK SYSTEMS**  
**DECONTAMINATION OF HEAVY EQUIPMENT**

1	Number of hours needed to decontaminate all heavy equipment used during closure of the unit (Enter from table at bottom of this worksheet)	2	work hrs	
	Enter types and number of Heavy Equipment being decontaminated			
	2 Pumps			
2	Cost of rental of steam cleaner per hour	9.58	\$ /hr	
3	Subtotal rental costs for steam cleaner (Multiply line 1 by line 2)		19.17	\$
4	Level of PPE assumed for this activity (protection level D, C, or B) a	C	level of PPE	
5	Labor cost per work hour b	89.83	\$	
6	Subtotal of labor costs (Multiply line 1 by line 5)		179.67	\$
7	Volume of decontamination fluid (Multiply line 1 by 100 gallons per hour) (The decontamination fluids generated may be disposed of in drums or as bulk liquid. If the volume is too large to be handled effectively by placement in drums, use worksheet TS-13B to calculate the cost of transportation and disposal. If the decontamination fluids are to be placed in drums, complete lines 8 through 10.)	200.00	gal	
8	Number of drums required to contain decontamination fluid for removal (Divide line 7 by 55 gallons per drum and round up to the nearest whole number)	4	drums	
9	Cost of one drum	263.50	\$ /drum	
	Check this box if you plan on disposing of the decontamination solution as bulk liquid	<input checked="" type="checkbox"/>	If you check this box, the treatment and disposal costs should be calculated	

			in Sheet TS-13B	
10	Cost of drums (Multiply line 8 by line 9)		0.00	\$
11	Cost of construction of temporary decontamination area for heavy equipment. Only include this cost if no permanent decontamination area exists (otherwise, enter 0). <b>NOTE: USUALLY THIS COST WILL BE INCURRED ONLY ONCE FOR THE CLOSURE OF ALL UNITS. THIS IS AN ASSUMED COST. IF YOU KNOW AN EXACT COST FOR THIS ITEM, ENTER IT INSTEAD.</b>		0	\$
12	Cost of demolition of temporary decontamination area for heavy equipment. Include this cost if no permanent decontamination area exists (otherwise, enter 0). <b>NOTE: USUALLY THIS COST WILL BE INCURRED ONLY ONCE FOR THE CLOSURE OF ALL UNITS. THIS IS AN ASSUMED COST. IF YOU KNOW AN EXACT COST FOR THIS ITEM, ENTER IT INSTEAD.</b>		0	\$
UD				\$
<b>TOTAL COST OF DECONTAMINATION OF HEAVY EQUIPMENT (Add lines 3, 6, 10, 11, and 12) (Enter total on worksheet TS-10, line 3)</b>			<b>198.83</b>	<b>\$</b>

**TS-11:TANK AND BOILER SYSTEM  
SAMPLING AND ANALYSIS SUMMARY SHEET**

SAMPLING AND ANALYSIS SUMMARY WORKSHEET			
	Activity	Number Worksheet	Cost (\$)
	1. Drilling and Subsurface Soil Sampling & Analysis	TS-11B	0.00
	2. Concrete Core Sampling & Analysis	TS-11C	0.00
<input checked="" type="checkbox"/>	3. Wipe Sampling & Analysis	TS-11D	1,591.01
	4. Surface Water/Liquid Sampling & Analysis	TS-11E	0.00
	5. Soil/Sludge/Sediment Sampling & Analysis	TS-11F	0.00
<b>TOTAL SAMPLING AND ANALYSIS COST (Add lines 1 through 5) (Enter total on Worksheet TS-1, line 9)</b>			<b>1,591.01</b>

Check  
boxes  
below  
to  
activate  
sheet



## TS-11A: TANK AND BOILER SYSTEM SAMPLE INVENTORY

### 1 NUMBER OF DRILLING AND SUBSURFACE SOIL SAMPLES

In the space below, identify the number of boreholes and the number of subsurface soil samples per borehole to be collected for each individual unit. Record the total number of samples to be collected in the box provided

1	Number of Subsurface Soil Samples		
	Boring Diameter:	0	0
		boreholes	total samples

### 2 NUMBER OF CONCRETE CORE SAMPLES

In the space below, identify the number of concrete core samples to be collected for each individual unit. Record the total number of samples to be collected

2	Number of Concrete Core Samples	0	total samples
---	---------------------------------	---	---------------

### 3 NUMBER OF WIPE SAMPLES

In the space below, identify the number of sample locations and the number of wipe samples per location to be collected for each individual unit.

3	Number of Wipe Samples:		
	2	2	4
	locations	samples/location	total samples

### 4 NUMBER OF SURFACE WATER/LIQUID SAMPLES

In the space below, identify the number of grab samples taken on lakes, rivers, or ponds and samples taken of liquid wastes such as rinsate and surface water. Record the total number of samples to be collected in the box provided.

4	Number of Aqueous Samples:		
	0	0	2
	locations	samples/location	total samples

**5 NUMBER OF SOIL/SLUDGE/SEDIMENT SAMPLES**

In the space below, identify the number of grab samples taken of surface soil, sludge, sediment, or concrete chips and the number of samples per location to be collected for each individual unit. Record the total number of samples to be collected in the box provided.

5	Number of Nonaqueous Samples:			
		0	0	0
		locations	samples/location	total samples

**TS-11D: TANK AND BOILER SYSTEMS**  
**WIPE SAMPLING & ANALYSIS**

<b>1</b>	<b>COLLECTING WIPE SAMPLES</b>		
1.A	Number of wipe samples to be collected (Enter from worksheet TS-11A, line 3)	4	samples
1.B	Level of PPE assumed for this activity (protection level D, C, or B) <i>a</i>	C	level of PPE
1.C	Labor and equipment cost per work hour <i>b</i>	195.505	\$
1.D	Work rate required to collect one sample <i>c</i>	0.5	work hr/sample
1.E	Number of hours required to collect all (Multiply line 1.A by line 1.D)	2	work hrs
<b>1.F</b>	<b>Cost to Collect Wipe Samples (Multiply line 1.C by line 1.E)</b>	391.01	\$
<b>2</b>	<b>ANALYZING WIPE SAMPLES</b>		
2.A	Cost of analysis per sampling event for wipe samples (Use table at the end of this worksheet to estimate).	300	\$ /event
2.B	Number of sampling events	4	events
<b>2.C</b>	<b>Cost to Analyze Wipe Samples (Multiply line 2.A by line 2.B)</b>	1,200.00	\$
<b>UD</b>			\$
<b>TOTAL COST OF COLLECTION AND ANALYSIS OF WIPE SAMPLES (Add lines 1.F and 2.C) (Enter total on Worksheet TS-11, line 3)</b>		1,591.01	\$

**TS-13:TANK AND BOILER SYSTEM  
TREATMENT AND DISPOSAL**

SUMMARY WORKSHEET			
Activity		Number Worksheet	Cost (\$)
1	Treatment and Disposal of Waste	TS-13A	760.00
2	Transportation and Disposal of Decontamination Fluids	TS-13B	976.32
<b>TOTAL COST OF TREATMENT AND DISPOSAL (Add lines 1 and 2) (Enter total on Worksheet TS-1, line 11)</b>			1736.32



**TS-13A:TANK AND BOILER SYSTEM  
TREATMENT AND DISPOSAL OF WASTE**

<b>1</b>	<b>TREATMENT AND DISPOSAL OF WASTE 1 (SOLID)</b>		
1.A	Volume of waste in yd3 to be treated or disposed of (If the waste is not recorded in yd3, use the factors in Table 1 of this worksheet to convert to yd3)		yd 3
1.B	Number of pounds per yd3 of waste (Select from Table 2 of this worksheet the density of material that most closely resembles the density of the waste to be treated or disposed of)	4,050.00	lb/yd3
1.C	Amount in lbs of waste to be treated and disposed of (Multiply line 1.A by line 1.B)	1,093.50	lb
1.D	Amount in tons of waste to be treated and disposed of (Divide line 1.C by 2,000)	0.55	tons
1.E	Treatment and disposal cost per ton	1,600.00	\$ /ton
<b>1.F</b>	<b>Cost to Treat and Dispose of Waste 1 (Multiply line 1.D by line 1.E)</b>		<b>0.00</b>
<b>2</b>	<b>TREATMENT AND DISPOSAL OF WASTE 2 (SOLID)</b>		
2.A	Volume of waste in yd3 to be treated or disposed of (If the waste is not recorded in yd3, use the factors in Table 1 of this worksheet to convert to yd3)		yd 3
2.B	Number of pounds per yd3 of waste (Select from table 2 of this worksheet the density of material that most closely resembles the density of the waste to be treated or disposed of)		lb/yd3
2.C	Amount in lbs of waste to be treated and disposed of (Multiply line 2.A by line 2.B)	0.00	lb
2.D	Amount in tons of waste to be treated and disposed of (Divide line 2.C by 2,000)	0.00	tons
2.E	Treatment and disposal cost per ton		\$ /ton
<b>2.F</b>	<b>Cost to Treat and Dispose of Waste 2 (Multiply line 2.D by line 2.E)</b>		<b>0.00</b>
<b>3 TRTMNT &amp; DISPOSAL OF WASTE - 1</b>	<b>TREATMENT AND DISPOSAL OF WASTE - 3 (LIQUID)</b>	<b>waste inventory – gal – on-site WWT</b>	

3.A	Volume of waste to be treated or disposed of. Indicate units.	304	unit
3.B	Treatment and disposal cost per unit (Waste Burnout)	2.50	\$ /unit
3.C	<b>Cost to Treat and Dispose of Waste 3 (Multiply line 3.A by line 3.B)</b>		<b>760.00</b>
4	<b>TREATMENT AND DISPOSAL OF WASTE - 4 (LIQUID)</b>		
4.A	Volume of waste to be treated or disposed of. Indicate units.		unit
4.B	Treatment and disposal cost per unit		\$ /unit
4.C	<b>Cost to Treat and Dispose of Waste 4 (Multiply line 4.A by line 4.B)</b>		<b>0.00</b>
5	<b>TREATMENT AND DISPOSAL OF WASTE - 5 (LIQUID)</b>		
5.A	Volume of waste to be treated or disposed of. Indicate units.		unit
5.B	Treatment and disposal cost per unit		\$ /unit
5.C	<b>Cost to Treat and Dispose of Waste 5 (Multiply line 5.A by line 5.B)</b>		<b>0.00</b>
6	<b>TREATMENT AND DISPOSAL OF WASTE - 6 (LIQUID)</b>		
6.A	Volume of waste to be treated or disposed of. Indicate units.		unit
6.B	Treatment and disposal cost per unit		\$ /unit
6.C	<b>Cost to Treat and Dispose of Waste 6 (Multiply line 6.A by line 6.B)</b>		<b>0.00</b>
7	<b>TREATMENT AND DISPOSAL OF WASTE - 7 (LIQUID)</b>		
7.A	Volume of waste to be treated or disposed of. Indicate units.		unit
7.B	Treatment and disposal cost per unit		\$ /unit
7.C	<b>Cost to Treat and Dispose of Waste 7 (Multiply line 7.A by line 7.B)</b>		<b>0.00</b>
8	<b>TREATMENT AND DISPOSAL OF WASTE - 8 (SLUDGE)</b>		
8.A	Volume of waste to be treated or disposed of. Indicate units.		unit
8.B	Treatment and disposal cost per unit		\$ /unit
8.C	<b>Cost to Treat and Dispose of Waste 8 (Multiply line 8.A by line 8.B)</b>		<b>0.00</b>
UD			
<b>TOTAL COST OF TREATMENT AND DISPOSAL (Add lines 1.F, 2.F, and 3.C through 8.C) (Enter total on Worksheet TS-13, line 1)</b>			<b>760.00</b>

**TS-13B:TANK AND BOILER SYSTEM  
TRANSPORTATION AND DISPOSAL OF DECONTAMINATION FLUIDS**

1	Volume of decontamination fluid generated from closure activities. Add all volumes calculated for closure activity worksheet to determine the total volume of liquid to be transported and disposed of. For each line item, specify the structure or equipment being decontaminated and the amount of decontamination fluids generated.		
	Flushing solution	110.00	gal
	Decontamination fluids - tank area	100.00	gal
	Decontamination fluids - boiler room	1,200.00	gal
			gal
			gal
	total gal	1,410.00	gal
2	Level of PPE assumed for this activity (protection level D, C, or B) <i>a</i>	C	level of PPE
3	Labor and equipment cost per work hour <i>b</i>	116.12	\$
4	Work rate to pump decontamination fluid to a holding tank (per gallon) <i>c</i>	0.000067	work hrs/gallon
5	Number of hours required to pump decontamination fluid to a holding tank (Multiply line 1 by line 4) (one hour minimum; round up to the half-hour)	0.23	work hours
6	Subtotal of labor and equipment cost to pump decontamination fluid to a holding tank (multiply line 3 by line 5)		10.97
7	Number of days of rental of holding tank (Round up line 5 to nearest 8 hours; divide by 8 hours per day)	0.03	days
8	Holding tank rental fee (10,000 gallon capacity) (flat rate per day)	207.90	\$/ day
9	Number of tanks required (Divide line 1 by 10,000 gallons; round up to the nearest whole number)	0.34	tanks
10	Subtotal of tank rental costs (Multiply lines 7, 8, and 9)		0.35
11	Removal/disposal cost per gallon of bulk liquid <i>in onsite WWTP</i>	0.50	\$ /gal

12	Subtotal of removal cost for bulk liquids (Multiply line 1 by line 11)	705.00
UD	Adjusted to reflect more accurate labor cost.	260.00
<b>TOTAL COST TO TRANSPORT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID (Add lines 6, 10, and 12) (Enter total on worksheet TS-13, line 2)</b>		<b>976.32</b>



**TS-14:TANK AND BOILER SYSTEM  
CERTIFICATION OF CLOSURE**

1	Number of units requiring certification of closure <i>a</i>	1	
2	Cost of certification of closure per unit <i>b</i>	12,035.24	\$
<b>TOTAL COST OF CERTIFICATION OF CLOSURE (Multiply line 1 by line 2) (Enter total on Worksheet TS-1, line 14)</b>			12,035.24

### UD1: USER DEFINED ACTIVITIES

Sr. No.	Activity	Cost (\$)
1	Boiler room decontamination	\$418
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
<b>TOTAL COST</b>		<b>418.00</b>

### Cost of Steam Cleaning/Pressure Washing of Other Units:

Specify the structure or equipment being decontaminated	Boiler Room Decon		
1	Area of unit to be decontaminated (Enter from Worksheet TS-2; add lines 2.C, 3.C, 5.C, and 7.A.1 and 7.B.2)	300.00	ft2
3	Labor and equipment cost per work hour <i>b</i>	46.47	\$

4	Work rate to steam clean or pressure wash one ft <sup>2</sup> c	0.03	work hrs/ft <sup>2</sup>
5	Number of hours required to steam clean or pressure wash the unit (Multiply line 1 by line 4) (One hour minimum; round up to the half-hour)	9.00	work hrs
6	Subtotal of labor and equipment cost to decontaminate the unit by steam cleaning or pressure washing (Multiply line 3 by line 5)		418.23
7	Volume of decontamination fluid (Multiply line 1 by 4 gal/ft ) (The decontamination fluids 2d generated may be disposed of in drums or as bulk liquid. If the volume is too large to be handled effectively by placement in drums, use worksheet TS-13B to calculate the costs	1,200.00	gal
8	Number of drums required to contain decontamination fluid for removal (Divide line 7 by 55 gallons per drum; round up to the nearest whole number)	21.82	drums
<u>9</u>	Cost of one drum	0.00	\$ /drum
10	Cost of drums needed to contain decontamination fluid (Multiply line 8 by line 9)		0.00
UD			
<b>TOTAL COST OF DECONTAMINATION OF UNIT BY STEAM CLEANING OR PRESSURE WASHING (For bulk liquids, enter from line 6. For liquids in drums, add lines 6 and 10.) (Enter total on Worksheet TS-10, line 1)</b>			<b>418.23</b>

## **Appendix I-2**

### **Financial Assurance Documentation**



United Initiators intends to use the Financial Test and Corporate Guarantee of OAC 3745-55-43(F) to document adequate financial assurance for closure of the Elyria facility. The documentation for this financial assurance mechanism is under development and will be submitted to the Ohio EPA upon completion.

## **Appendix I-3**

### **Liability Coverage**

United Initiators will submit a new Certificate of Liability Insurance in 2018

## **SECTION I**

### **CORRECTIVE ACTION FOR WASTE MANAGEMENT UNITS**

#### **J-1 CORRECTIVE ACTION PROGRAM**

In August, 1986, at the request of the United States Environmental Protection Agency (USEPA) a Groundwater Quality Investigation (GQI) was initiated as a condition of the facility's Resource Conservation and Recovery Act (RCRA) Part B Permit.

As a result of the GQI, a RCRA Facility Investigation (RFI) was initiated in 1988. The tasks of the RFI were:

- source characterization
- hazardous constituent characterization
- analytical program
- exposure assessment
- RFI report.

The RFI report was submitted in February, 1995.

In 1992, a Voluntary Corrective Measures (VCM) project that removed the source of contamination was completed.

As a result of the RFI, a Corrective Measures Study (CMS) was initiated and a final report submitted in October, 1996, to address groundwater.

In February, 1998, a Conceptual Design report (CD) was submitted for the selected corrective measures.

The corrective measures include the following components:

- Collection of contaminated groundwater via two extraction wells to contain the constituent plume on site.
- Treatment of the extracted groundwater to meet the target cleanup levels using air stripping and possibly granular activated carbon GAC.
-



- Implementation of deed restrictions including groundwater use restrictions to limit the use of the groundwater during the remedy, and land use restrictions to limit the facility use to industrial or commercial use only.
- Quarterly groundwater monitoring to evaluate the effectiveness of the remedy.

The corrective measures were implemented and treatment proceeded until the target cleanup levels were met.

On November 4, 2014, the Ohio EPA approved a final Class 3 modification of the United Initiators permit, terminating the Corrective Action activities at the facility. That approval is included as Appendix J-1 to this section. Appendix J-1 also includes a March 31, 2015 letter confirming that corrective action performance standards have been attained with controls (e.g., an environmental covenant with Ohio EPA).

## **Appendix J-1**

### **Termination of Corrective Action**



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Craig W. Butler, Director

November 4, 2014

Jeff Lenchak  
United Initiators, Inc.  
555 Garden Street  
Elyria, Ohio 44035

**Re: United Initiators, Inc.  
Permit - Long Term  
Approval  
RCRA C - Hazardous Waste  
Lorain County  
OHD 046 202 602**

**Subject: Class 3 Hazardous Waste Permit Modification Final Issuance**

Dear Mr. Lenchak:

On November 4, 2014, the Director of Ohio EPA approved a final Class 3 modification application from United Initiators, Inc. (United Initiators) requesting to terminate Corrective Action activities at the facility located at 555 Garden Street, Elyria, Ohio 44035 in Lorain County. This modified permit will allow United Initiators to make the requested changes. To issue this final permit, Ohio EPA determined that the modification application is complete and meets appropriate standards. The Agency did not receive any comments concerning this Class 3 modification application. Enclosed is the final permit that was issued by the Director today. Please note that the permit remains in effect until it is renewed, withdrawn, suspended or revoked.

You are hereby notified that this action of the Director of Ohio EPA (Director) is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 made payable to "Treasurer, State of Ohio." The Commission, in its discretion, may reduce the fee if by affidavit it is demonstrated that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
77 South High St., 17<sup>th</sup> Floor  
Columbus, Ohio 43215

Re: Jeff Lenchak; United Initiators, Inc.

Page 2

If you have any questions, please contact Paul Dolensky of Ohio EPA's Northeast District Office at (330) 963-1200.

Sincerely,



Demitria Crumiell-Hagens, Administrative Professional II  
Division of Materials and Waste Management

Enclosure

cc: John Nyers, DMWM, CO  
Scott Hester, DMWM, CO  
Paul Dolensky, DMWM, NEDO  
Nyal McKenna, DMWM, NEDO  
Ed Lim, DERR, CO  
Jeremy Carroll, DMWM, CO  
Heidi Griesmer, PIC  
Todd Anderson, DMWM, CO  
Jae Lee, US EPA, Region 5  
Facility Mailing List

File



OHIO E.P.A.

NOV -4 2014

ENTERED DIRECTOR'S JOURNAL

**OHIO ENVIRONMENTAL PROTECTION AGENCY**

**MODIFIED OHIO HAZARDOUS WASTE FACILITY  
INSTALLATION AND OPERATION PERMIT**

Date of Issuance: **NOV 04 2014**  
Effective Date: **NOV 04 2014**

U.S. EPA ID No.: OHD 046-202-602

**Name of Permittee:** United Initiators, Inc.  
**Mailing Address:** United Initiators, Inc.  
555 Garden Street  
Elyria, OH 44035-4403  
**Facility Location:** 555 Garden Street  
Elyria, OH 44035-4403  
**Person to Contact:** Jeff Lenchak

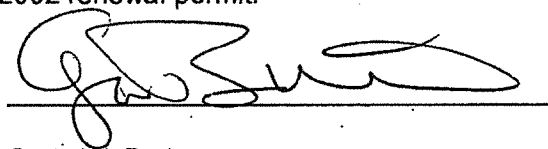
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This Modified Ohio Hazardous Waste Facility Installation and Operation Permit is issued pursuant and subject to Section 3734.05(I) of the Ohio Revised Code and Rule 3745-50-51(D) of the Ohio Administrative Code.

The Ohio Hazardous Waste Facility Installation and Operation Permit with the above-referenced permit number as issued by the Ohio Environmental Protection Agency and journalized on March 1, 2002, is hereby incorporated by reference in its entirety, except as it may be modified herein.

This modification of the permit shall remain in effect until such time as the Ohio Hazardous Waste Facility Installation and Operation Permit is renewed, modified, withdrawn, suspended, or revoked.

The modified Terms and Conditions of this permit are attached hereto and are incorporated herein by reference. The modified Terms and Conditions supersede and replace the corresponding pages found in the March 1, 2002 renewal permit.



Craig W. Butler

Director

## **MODULE A - GENERAL PERMIT CONDITIONS**

### **A.1. Effect of Permit**

ORC Sections 3734.02 (E) and (F) and 3734.05  
OAC Rule 3745-50-58(G)

(a) Reserved.

(b) Any management of hazardous waste not authorized by this permit is prohibited, unless otherwise expressly authorized or specifically exempted by law. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or invasion of other private rights. Compliance with the terms and conditions of this permit does not obviate Permittee's obligation to comply with other applicable provisions of law governing protection of public health or the environment including but not limited to the Community Right to Know law under ORC Chapter 3750.

### **A.2. Permit Actions**

OAC Rule 3745-50-58(F)

This permit may be modified, revoked, suspended, or renewed as specified by Ohio law. The filing of a request for a permit modification, revocation, suspension, or renewal or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit term or condition.

### **A.3. Permit Effective/Expiration Date**

OAC Rule 3745-50-54

The effective date of this permit is the date the permit is entered into the Director's Journal. The permit expiration date is ten years after the date of journalization of this permit.

### **A.4. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

A.5. Duty to Comply  
OAC Rule 3745-50-58(A)

The Permittee shall comply with all applicable provisions of ORC Chapter 3734, all applicable Ohio hazardous waste rules, and all terms and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by the laws of the State of Ohio. Any permit noncompliance, other than noncompliance authorized by the laws of the State of Ohio, constitutes a violation of ORC Chapter 3734 and the rules adopted thereunder and is grounds for enforcement action, suspension, revocation, modification, denial of a permit renewal application or other appropriate action.

A.6. Duty to Reapply and Permit Expiration  
OAC Rules 3745-50-40(E); 3745-50-58(B); 3745-50-56 and ORC Section 3734.05(H)

- (a) Reserved.
- (b) The Permittee may continue to operate in accordance with the terms and condition of the expired permit until a renewal permit is issued or denied if:
  - (i) the Permittee has submitted a timely and complete application for a renewal permit under OAC Rule 3745-50-40; and
  - (ii) through no fault of the Permittee, a new permit has not been issued pursuant to OAC Rule 3745-50-40 on or before the expiration date of this permit.
- (c) Reserved.

A.7. Need to Halt or Reduce Activity Not a Defense  
OAC Rule 3745-50-58(C)

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce a permitted activity in order to maintain compliance with the conditions of this permit.

A.8. Duty to Mitigate  
OAC Rule 3745-50-58(D)

The Permittee shall expeditiously take all reasonable steps necessary to minimize or correct any adverse impact on the environment or the public health resulting from noncompliance with this permit.

A.9. Proper Operation and Maintenance  
OAC Rule 3745-50-58(E)

The Permittee shall at all times properly operate and maintain the facility (and related appurtenances) to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective management practices, adequate funding, adequate operator staffing and training, and where appropriate, adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the terms and conditions of this permit.

A.10. Duty to Provide Information  
OAC Rule 3745-50-58(H)

The Permittee shall furnish the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking or suspending this permit or to determine compliance with this permit. The Permittee shall also furnish the Director, upon request, copies of records required to be kept by this permit.

A.11. Inspection and Entry  
OAC Rules 3745-50-58(I), 3745-50-30 and ORC Section 3734.07

- (a) The Permittee shall allow the Director, or an authorized representative, upon stating the purpose and necessity of the inspection and upon proper identification to:
  - (i) enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the terms and conditions of this permit;
  - (ii) have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
  - (iii) inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the terms and conditions of this permit; and



- (iv) sample, document, or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 3734 and the rules adopted thereunder, any substances or parameters at any location.
- (b) Any record, report or other information obtained under the hazardous waste rules or Chapter 3734 of the Revised Code shall not be available to the public upon the Permittee's satisfactory showing to Ohio EPA that all or part of the information would divulge methods or processes entitled to protection as trade secrets pursuant to Ohio Trade Secret Law and OAC Rule 3745-50-30.

A.12. Monitoring and Records  
OAC Rule 3745-50-58(J)

- (a) Any sample and measurement taken for the purpose of monitoring shall be a representative sample or measurement, as such term is defined and used in the Ohio hazardous waste rules. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of OAC Rule 3745-51-20, Laboratory Methods. Laboratory methods must be those specified in Test Methods for the Evaluation of Solid Waste: Physical /Chemical Methods; SW-846: Third Edition, November 1992; and additional supplements or editions thereof; Standard Methods for the Examination of Water and Wastewater: Seventeenth Edition, 1989; or an equivalent method as specified in the approved waste analysis plan, or as such term is defined and used in the Ohio hazardous waste rules.
- (b) Records of monitoring information shall specify the:
  - (i) date(s), exact place(s), and time(s) of sampling or measurements;
  - (ii) individual(s) who performed the sampling or measurements;
  - (iii) date(s) analyses were performed;
  - (iv) individual(s) who performed the analyses;
  - (v) analytical technique(s) or method(s) used; and
  - (vi) results of such analyses.

A.13. Signatory Requirement and Certification of Records  
OAC Rules 3745-50-58(K) and 3745-50-42

All applications, reports or information shall be properly signed and certified in accordance with OAC Rule 3745-50-58(K).

A.14. Retention of Records  
OAC Rules 3745-50-58(J) and 3745-50-58(M)

- (a) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by OAC Rule 3745-54-73(B)(9), and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification, or application.
- (b) The record retention period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding the facility.
- (c) The Permittee shall maintain, in accordance with the Ohio hazardous waste rules, records of all data used to complete the Part B permit application and any amendments, supplements, or modifications of such application and shall retain a complete copy of the application for the life of the facility.
- (d) The Permittee shall maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility and for disposal facilities for the post-closure care period as well.
- (e) Corrective Action records must be maintained at least 3 years after all Corrective Action activities have been completed.

A.15. Planned Changes  
OAC Rules 3745-50-51 and 3745-50-58(L)(1)

The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. All such changes must be made in accordance with OAC Rule 3745-50-51.

A.16. Waste Shipments

OAC Rule 3745-52-12, ORC Section 3734.15(C)

The Permittee shall only use properly registered transporters of hazardous waste to remove hazardous waste from the facility, in accordance with all applicable laws and rules.

A.17. Anticipated Noncompliance

OAC Rule 3745-50-58(L)(2)

The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or operations which may result in noncompliance with the terms and conditions of this permit. Such notification does not waive the Permittee's duty to comply with this permit pursuant to Condition A.5.

A.18. Transfer of Permits

OAC Rules 3745-50-52, 3745-50-58(L)(3) and 3745-54-12

- (a) This permit is not transferable to any person except after notice of the director.
- (b) The permit may be transferred to a new owner or operator only if such transfer is conducted in accordance with ORC Chapter 3734 and the rules adopted thereunder. This permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified under OAC Rule 3745-50-51. Before transferring ownership or operation of the facility, the Permittee shall notify the new owner or operator in writing of the requirements of ORC Chapter 3734 and the rules adopted thereunder (including all applicable corrective action requirements).
- (c) The Permittee's failure to notify the new owner or operator of the requirements of the applicable Ohio law or hazardous waste rules does not relieve the new owner or operator of its obligation to comply with all applicable requirements.

A.19. Reserved

A.20. Immediate Reporting of Noncompliance

OAC Rule 3745-50-58(L)(6)

- (a) The Permittee shall report orally to the Ohio Environmental Protection Agency's Division of Environmental Response and Revitalization within two hours from the time the Permittee becomes aware of any

noncompliance with this permit, ORC Chapter 3734 or the rules adopted thereunder, which endangers human health or the environment, including:

- (i) information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies; and
  - (ii) any information of a release or discharge of hazardous waste or a fire or explosion from the hazardous waste facility, which could threaten the environment or human health outside the facility.
- (b) The report shall consist of the following information (if such information is available at the time of the oral report):
- (i) name, address, and telephone number of the owner or operator;
  - (ii) name, address, and telephone number of the facility;
  - (iii) name and quantity of material(s) involved;
  - (iv) the extent of injuries, if any;
  - (v) an assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
  - (vi) estimated quantity and disposition of recovered material that resulted from the incident.

**A.21. Follow-Up Written Report of Noncompliance**  
**OAC Rule 3745-50-58(L)(6)(c)**

- (a) A written report shall also be provided to the Ohio Environmental Protection Agency's Division of Environmental Response and Revitalization and the Division of Materials and Waste Management, Northeast District Office within five (5) days of the time the Permittee becomes aware of the circumstances reported in Condition A.20.
- (b) The written report shall address the items in Condition A.20 and shall contain a description of such noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to minimize the impact on human health and the environment and to reduce, eliminate, and prevent recurrence of the noncompliance.



- (c) The Permittee need not comply with the five (5) day written report requirement if the Director, upon good cause shown by the Permittee, waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

A.22. Other Noncompliance

OAC Rules 3745-50-58(L)(10) and 3745-50-58(L)(4)

The Permittee shall report to the Director, all other instances of noncompliance not provided for in Condition A.20. These reports shall be submitted within a month of the time at which the Permittee is aware of such noncompliance. Such reports shall contain all information set forth within Condition A.20 of this permit.

A.23. Other Information

OAC Rule 3745-50-58(L)(11)

If at any time the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect, misleading, or incomplete information to the Director, the Permittee shall promptly submit such facts, information or corrected information to the appropriate entity.

A.24. Confidential Information

OAC Rule 3745-50-30

In accordance with ORC Chapter 3734 and the rules adopted thereunder, the Permittee may request confidentiality of any information required to be submitted by the terms and conditions of this permit, including any information obtained by the Director, or an authorized representative, pursuant to the authority provided under Condition A.11. of this permit.

A.25. Reserved

A.26. Information to be Maintained at the Facility

OAC Rule 3745-54-74

- (a) Corrective Action reports and records as required by this permit must be maintained for at least 3 years after all Corrective Action Activities have been completed.

A.27. Reserved

A.28. Reserved.

## **MODULE B - GENERAL FACILITY CONDITIONS**

**B.1. Design, Maintenance and Operation of Facility**  
OAC Rule 3745-54-31

The Permittee shall design, construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, and ground or surface waters which could threaten human health or the environment.

**B.2. through B.22. Reserved**

**B.23. Manifest System**  
OAC Rules 3745-54-70, 3745-54-71, 3745-54-72 and 3745-54-76

In the management of waste at the facility, the Permittee shall comply with the provisions of OAC Chapter 3745-52 and OAC Rules 3745-54-71, 3745-54-72 and 3745-54-76 with regard to the manifest system.

**B.24. through B.35. Reserved**

**B.36. Incapacity of Owners or Operators, Guarantors, or Financial Institutions**  
OAC Rule 3745-55-48

The Permittee shall comply with the requirements set forth in OAC Rule 3745-55-48 regarding the incapacity of owners, operators, guarantors or financial institutions.

**B.37. General Requirements for Land Disposal Restrictions**  
OAC Chapter 3745-59

- (a) The Permittee shall comply with all applicable regulations regarding land disposal prohibitions and restrictions as required by OAC Chapter 3745-59.

**MODULE C - Reserved**

**MODULE D - Reserved**



## **MODULE E - CORRECTIVE ACTION REQUIREMENTS**

### Corrective Action Summary

In August 1986, the United States Environmental Protection Agency (U.S. EPA) requested a Groundwater Quality Investigation (GQI) to be conducted at United Initiators, Inc., as a condition of the facility's Resource Conservation and Recovery Act (RCRA) Permit. As a result of the GQI, a RCRA Facility Investigation (RFI) was initiated in 1988. The tasks of the RFI were: source characterization; hazardous constituent characterization; analytical program establishment; exposure assessment; and RFI report preparation. In 1992, prior to completion of the RFI, a Voluntary Corrective Measures (VCM) project that removed the source of contamination was completed. Activities included excavation and off-site disposal of contaminated soils and waste from seven waste management units (WMUs).

The RFI report was conditionally approved in September 1995. As a result of the RFI approval, a Corrective Measures Study (CMS) was initiated to address contaminated groundwater at the facility. The CMS report evaluated several options to remediate the contaminated groundwater. From these options, the U.S. EPA selected an appropriate remedial alternative for implementation. The remedy selected for implementation consists of the following:

- (i) Collect contaminated groundwater using extraction wells to contain the contaminant plume on site.
- (ii) Treat extracted groundwater to meet the target cleanup levels of the organic contaminants using air stripping and activated carbon units.
- (iii) Implement groundwater use restrictions to limit use of the groundwater during implementation of the remedy and land use restrictions to limit the facility property to only industrial or commercial use.
- (iv) Perform quarterly groundwater monitoring to evaluate the remedy's effectiveness and to monitor potential migration of contaminated groundwater from the facility. After two consecutive years of quarterly monitoring, United Initiators, Inc. may request, in writing, that the Director allow a decrease in the frequency in monitoring, providing the baseline information is sufficient to determine the effectiveness of the remedy.
- (v) Conduct laboratory analysis on the groundwater samples. The constituents will, at a minimum, include those identified during the RFI and other investigations, as well as any potential daughter products of those constituents.

- (vi) The RFI identified the groundwater medium as being contaminated. The Permittee shall treat the groundwater to meet the following cleanup levels: Benzene 5 parts per billion (ppb); Ethyl benzene 700 ppb; 4-Methylphenol 78 ppb; Benzoic acid 61,600 ppb; Di-n-butylphthalate 1,571 ppb; Lead 15 ppb; Nickel 100 ppb; Zinc 4,665 ppb.

On September 30, 1997, the U.S. EPA modified the United Initiators, Inc. (formerly known as Aztec Peroxides, Inc.) federal RCRA permit to require implementation of the above described remedy. On January 25, 2000, the U.S. EPA gave final approval of the Final Design Summary and Construction Workplan, and instructed United Initiators, Inc. to begin remedy implementation in accordance with those plans. On March 1, 2002, a permit renewal was issued with Ohio EPA taking over the lead of the Corrective Action activities.

An environmental covenant limiting groundwater use during implementation of the remedy and land use restrictions to limit the facility property to only industrial or commercial use was signed on October 4, 2006 and recorded with the Lorain County Recorder and Auditor on November 16, 2006.

A groundwater recovery and treatment system was operated at the United Initiators, Inc. site from September 2000 to July 2009. The system was shut down with Ohio EPA approval (June 30, 2009 letter). In September 2009, the facility began a quarterly verification groundwater monitoring program to demonstrate that the groundwater concentrations of the contaminants of concern remain below MCLs or other risk based target clean-up levels for eight consecutive sampling events conducted over the course of two years. The eight quarters of post-remediation monitoring was successfully completed in June 2011. On December 18, 2012, Ohio EPA approved a Pump-and-Treat System Closure Work Plan which included the removal of the pump-and-treat system and the proper abandonment of the groundwater monitoring wells. The wells and treatment system were removed in June 2013 and the facility submitted a Pump-and-Treat System Closure Report summarizing the well abandonment and treatment system removal activities in October 2013.

On October 28, 2013, United Initiators, Inc. submitted a Class 3 modification application to terminate Corrective Action activities at the United Initiators, Inc. facility (Facility). Ohio EPA determined that there are no releases of hazardous waste or constituents from WMUs at the Facility that pose a threat to human health or the environment and that Corrective Action has been completed.

E.1. Corrective Action at the Facility  
OAC Rules 3745-50-10 & 3745-54-101

In accordance with OAC Rule 3745-50-10 "waste management unit" means any discernible unit at which wastes have been placed at any time, irrespective of whether the unit was intended for the management of waste or hazardous waste. Such units include any area at a Facility at which wastes have been routinely and systematically released. As used in this permit the term "waste management unit" shall be consistent with and equivalent to the term "solid waste management unit" as that term is defined in Section 3004(u) of RCRA. For the purpose of corrective action, "facility" is defined as all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. The terms Interim Measure (IM), RCRA Facility Investigation (RFI), Corrective Measures Study (CMS) and Corrective Measure Implementation (CMI) are defined in Attachment 1, U.S. EPA's Corrective Action Plan (CAP).

E.2. Reserved

E.3. Identification of WMUs  
OAC Rules 3745-50-44(D) and 3745-54-101

The following WMUs and Areas of Concern (OAC) were investigated under U.S. EPA authority during the RCRA Facility Investigation (RFI) and the voluntary waste removal project:

Waste Management Units Investigated	
1	Area 1
2	Area 2
3	Area 3
4	Area 4
5	Area 5
6	Area 6
7	Area 7
8	Eastern Parcel OAC
9	Former Lagoon Area
10	Western Parcel OAC

11	Container Storage Area
12	Incinerator

E.4. Reserved

E.5. Reserved

E.6. Determination of No Further Action

(a) SWMUs identified as No Further Action

Based on the results of the completed RFI and other relevant information, the U.S. EPA has determined that the soils in WMU Area 1, WMU Area 2, WMU Area 3, WMU Area 4, WMU Area 5, WMU Area 6, WMU Area 7, Container Storage Area WMU, Incinerator WMU, Former Lagoon Area, Eastern Parcel OAC, and Western Parcel OAC, which were investigated do not pose a threat to human health and the environment as long as the property is limited to industrial use. Therefore, these WMUs do not require further action.

(b) Reserved

E.7. Reserved

E.8. Reserved

E.9. Reserved

E.10. Reserved

E.11 Newly Identified WMUs or Releases  
OAC Rule 3745-54-101

(a) General Information

The Permittee shall submit to Ohio EPA, within 30 days of discovery, the following information regarding any new WMU identified at the Facility:

(i) The location of the unit on the site topographic map;



- (ii) Designation of the type of unit;
- (iii) General dimensions and structural description (supply any available drawings);
- (iv) When the unit was operated; and
- (v) Specifications of all waste(s) that have been managed at the unit.

(b) Release Information

The Permittee shall submit to Ohio EPA, within 30 days of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing WMU.



John R. Kasich, Governor  
Mary Taylor, Lt. Governor  
Craig W. Butler, Director

March 31, 2015

RE: UNITED INITIATORS LLC, ELYRIA  
REMEDATION RESPONSE  
PROJECT RECORDS  
RCRA C – HAZARDOUS WASTE  
LORAIN COUNTY  
OHD046202602

Memo to File

From: Kim Gallagher, DERR, NEDO

Subject: Corrective Action Performance Standards Attained (Controls Required), United Initiators LLC, Elyria, USEPA ID No. OHD 046 202 602, Site ID No. 247000137

The United Initiators LLC, Elyria, facility, located on Garden Street, in Elyria, Ohio, has achieved CA900CR (Corrective Action Performance Standards Attained – Controls Required). Remedies selected for the protection of human health and the environment have been fully implemented and associated performance standards have been attained at the specific areas within the facility where contamination of environmental media was identified.

United Initiators LLC, Elyria, held a RCRA Part B Permit, which provided the authority for Closure and Corrective Action. The permit sections for Closure and Corrective action have since been removed.

In August 1986, U.S. EPA requested a Ground Water Quality Investigation to be conducted as a condition of the RCRA permit. As a result, a RCRA Facility Investigation (RFI) was initiated in 1988 under U.S. EPA authority. In 1992, prior to completion of the RFI, a Voluntary Corrective Measures project that removed the source of contamination was completed under U.S. EPA authority. Activities included excavation and off-site disposal of contaminated soils and waste from seven waste management units (WMUs). 12 WMUs were investigated. The WMUs included Areas 1 through 7, Eastern Parcel AOC, Former Lagoon Area, Western Parcel AOC, Container Storage Area, and the Incinerator.

U.S. EPA determined that soils in the WMUs do not pose a threat to human health and the environment as long as the property is limited to industrial use.

The RFI report was conditionally approved in September 1995. As a result of the RFI approval, a Corrective Measures Study (CMS) was initiated to address contaminated ground water at the facility. The preferred remedy included:

- Collect contaminated ground water after using extraction wells to contain the contaminant plume on site.

- Treat extracted ground water to meet the target cleanup levels of the organic contaminants using air stripping and activated carbon units.
- Implement ground water use restrictions to limit use of the ground water during implementation of the remedy and land use restrictions to limit the facility property to only industrial or commercial use.
- Perform ground water monitoring.
- Conduct laboratory analysis on the ground water samples.
- Treat ground water to meet the following cleanup levels: Benzene 5 ppb, Ethyl benzene 700 ppb, 4-Methylphenol 78 ppb, Benzoic acid 61,600 ppb, Di-n-butylphthalate 1,571 ppb, Lead 15 ppb, Nickel 100 ppb, Zinc 4,665 ppb.

On September 30, 1997, USEPA modified the permit to require implementation of the remedy. On January 25, 2000, U.S.EPA gave final approval of the Final Design Summary and Construction Work Plan, and instructed the facility to begin remedy implementation in accordance with those plans. On March 1, 2002 a permit renewal was issued with Ohio EPA taking over the lead of the Corrective Action activities.

An Environmental Covenant limiting ground water use during implementation of the remedy and land use restrictions to limit the facility property to only industrial or commercial use was signed on October 4, 2006 and recorded with the Lorain County Recorder and Auditor on November 16, 2006.

The ground water recovery and treatment system operated from September 2000 to July 2009. Ohio EPA approved the shutdown of the ground water recovery and treatment system on June 30, 2009. Verification sampling began in September 2009 and was completed in June 2011. Verification sampling showed that the ground water met the performance standards or cleanup levels. The Pump-and-Treat Closure Work Plan for the ground water system was approved on December 18, 2012. The wells were properly abandoned in June 2013 and the Closure Report was submitted in October 2013.

United Initiators LLC, Elyria entered into an Environmental Covenant with Ohio EPA to restrict land use to industrial or commercial only. The Environmental Covenant was recorded at the Lorain County Records office on November 16, 2006.

Ohio EPA has concluded that based on current information, additional investigation is not necessary, and all remedies are complete. Corrective Action performance standards have been attained with controls.

Document Completed by: Kim Gallagher Date: 3-31-15

Kim Gallagher  
Environmental Specialist 2  
State of Ohio Environmental Protection Agency

Environmental Specialist 3: John Palmer Date: 15-03-31

John Palmer  
Environmental Specialist 3  
State of Ohio Environmental Protection Agency

Supervisor:

Harry Courtright

Date:

3/31/15

Harry Courtright  
Environmental Supervisor  
State of Ohio Environmental Protection Agency

**Locations where references may be found:**

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2110 East Aurora Road  
Twinsburg, Ohio 44087

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## **SECTION K**

### **OTHER FEDERAL LAWS**

In accordance with 40 CFR 270.3, United Initiators, Inc. has evaluated applicability of the following Federal laws and regulations, and believes that none of these laws applies to this facility. United Initiators is in compliance with the following: the Wild and Scenic Rivers Act, the National Historic Preservation Act of 1966, the Endangered Species Act, the Coastal Zone Management Act, and the Fish and Wildlife Coordination Act

#### **K-1 The Wild And Scenic Rivers Act. (16 U.S.C. 1273 et seq.)**

The United Initiators facility is not located on or near any water defined as a Wild or Scenic River under the Wild and Scenic Rivers Act, nor any Study Rivers being evaluated as a potential component of the Wild and Scenic River system. The facility is located approximately ½ mile from the West Branch of the Black River, which is included in the Nationwide Rivers Inventory (see Appendix K-1). Activities at the United Initiators facility will not affect the natural, cultural, and recreational values of Black River.

#### **K-2 The National Historic Preservation Act of 1966. (16 U.S.C. 470 et seq.)**

The United Initiators facility is not listed in the National Registry of Historic Places, as reported at the Ohio National Register Searchable Database (<http://nr.ohpo.org/>). There are no registered historic sites on Garden Street or on Woodford Avenue, and none identified within ½ mile of the facility. Activities at the United Initiators facility will not cause potential adverse effects on properties listed or eligible for listing in the National Register of Historic Places.

#### **K-3 The Endangered Species Act. (16 U.S.C. 1531 et seq.)**

According to the Ohio County Distribution of Federally-Listed Threatened, Endangered, Proposed, and Candidate Species (Revised April, 2015), there are five threatened or endangered species in Lorain County, Ohio. See Appendix K-2 for a listing and description of these species. Two of the endangered and threatened species are bats, which live in the area year-round, hibernating in caves and mines. However, there is no evidence of any bat habitat at or in the immediate vicinity of the United Initiators facility. The other three endangered and threatened species are migratory birds and/or shorebirds, none of which utilize habitat at the United Initiators facility. Based on this information, the hazardous

waste management activities at the United Initiators facility will not jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

K-4 The Coastal Zone Management Act. (16 U.S.C. 1451 et seq.)

United Initiators is located approximately 8 miles south of the nearest Coastal Management Area, as confirmed by the Ohio Coastal Atlas Map Viewer maintained by the Ohio Department of Natural Resources, Office of Coastal Management. Operations at United Initiators will not affect land or water use in the coastal zone. Appendix K-3 is a map showing the nearest Coastal Management Area in relation to the United Initiators facility.

K-5 The Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.)

Operations addressed in this permit application do not involve impoundment, diversion, or control of any body of water as addressed under The Fish and Wildlife Coordination Act.

## **Appendix K-1**

### **Nationwide Rivers Inventory**

**Nationwide Rivers Inventory  
(National Park Service, National Center for Recreation & Conservation)**

River	County	Reach	Length (miles)	Year Listed/ Updated	Potent'l Classif	<a href="#">ORVs</a>	Description
Black River, West Branch	Lorain, Huron	River mile 7 to source	41	1982		S, G, W, H	Contains state endangered species, Big Mouth Shiner. Numerous rock out-croppings and very large rocks. Good recreational river used for outdoor nature study. Low waterfalls and caves. Old dam, gristmill and Indian burial ground at Elyria.

<https://www.nps.gov/ncrc/programs/rtca/nri/states/oh.html>

**Key to Outstandingly Remarkable Values (ORVs)**

The following eligibility criteria are offered to foster greater consistency within the federal river-administering agencies. They are intended to set minimum thresholds to establish ORVs and are illustrative but not all-inclusive. If utilized in an agency's planning process, these criteria may be modified to make them more meaningful in the area of comparison, and additional criteria may be included.

1. Scenery (S): The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. When analyzing scenic values, additional factors -- such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed -- may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

2. Recreation (R): Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing and boating. Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region of comparison.



◦The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

3. Geology (G): The river, or the area within the river corridor, contains one or more example of a geologic feature, process or phenomenon that is unique or rare within the region of comparison. The feature(s) may be in an unusually active stage of development, represent a "textbook" example, and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures).

4. Fish (F): Fish values may be judged on the relative merits of either fish populations, habitat, or a combination of these river-related conditions. ◦Populations: The river is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

◦Habitat: The river provides exceptionally high quality habitat for fish species indigenous to the region of comparison. Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

5. Wildlife (W): Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat or a combination of these conditions. ◦Populations: The river, or area within the river corridor, contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

◦Habitat: The river, or area within the river corridor, provides exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide unique habitat or a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

6. Prehistory (P): The river, or area within the river corridor, contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have unique or rare characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; and/or may have been used by cultural groups for rare sacred purposes. Many such sites are listed on the National Register of Historic Places, which is administered by the NPS.

7. History (H): The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region. Many such sites are listed on the National Register of Historic Places. A historic site(s) and/or features(s) is 50 years old or older in most cases.

8. Cultural (C): The river or area within the river corridor contains archaeological sites or areas significant to traditional cultures. Examples might be American Indian burial grounds, petroglyphs, the oldest known human use site in a region, or streams that support traditional agriculture, subsistence fishing, or religious ceremonies.

9. Other Values (O): While no specific national evaluation guidelines have been developed for the "other similar values" category, assessments of additional river-related values consistent with the foregoing guidance may be developed -- including, but not limited to, hydrology, paleontology and botany resources.

#### Potential Classification

The Act and Interagency Guidelines provide the following direction for establishing preliminary classifications for eligible rivers:

- Wild rivers (W): Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic rivers (S): Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

- Recreational rivers (R): Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

## **Appendix K-2**

### **Threatened and Endangered Species**

## Threatened and Endangered Species, Lorain County, Ohio

County	Species	Status	Habitat
Lorain	<a href="#">Indiana bat</a> ( <i>Myotis sodalis</i> )	Endangered	Hibernacula = Caves and mines; Maternity and foraging habitat = small stream corridors with well developed riparian woods; upland forests
	<a href="#">Northern long-eared bat</a> <i>Myotis septentrionalis</i>	Threatened	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. During late spring and summer roosts and forages in upland forests.
	<a href="#">Kirtland's warbler</a> ( <i>Dendroica kirtlandii</i> )	Endangered	Kirtland's warblers are known to migrate along the Lake Erie shoreline counties (Ashtabula, Cuyahoga, Erie, Lake, Lorain, Lucas, Ottawa, Sandusky counties) through Ohio in late April-May and late August-early October.
	<a href="#">Piping plover</a> ( <i>Charadrius melodus</i> )	Endangered	Beaches along shorelines of the Great Lakes
	<a href="#">Red Knot (Rufa)</a> <i>Calidris canutus rufa</i>	Threatened	Present in Ohio during spring and fall migration

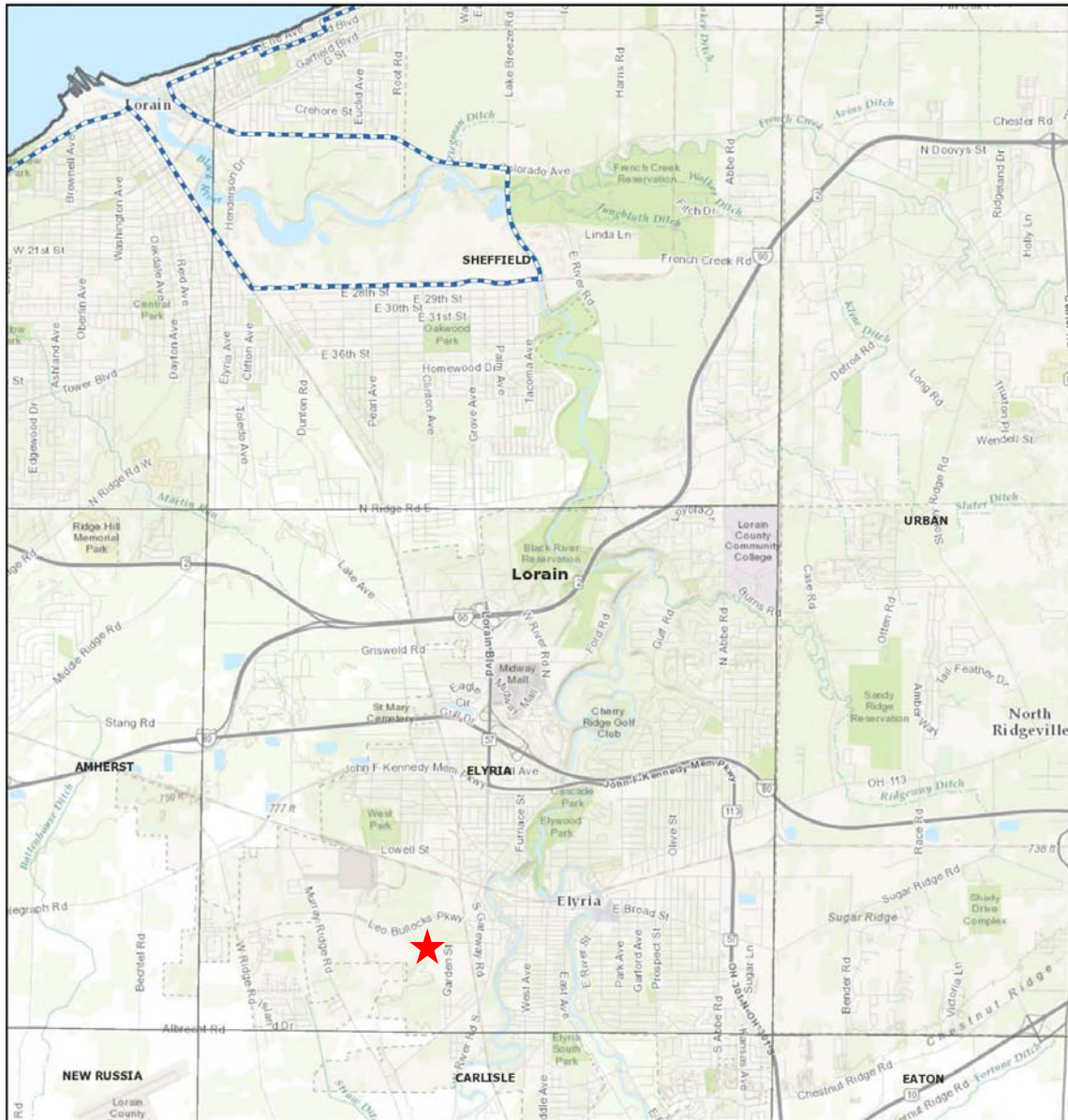
Source: Ohio County Distribution of Federally-Listed Threatened, Endangered, Proposed, and Candidate Species, Revised April 2015

## **Appendix K-3**

### **Coastal Management Map**



## Ohio Coastal Atlas Map Viewer



June 24, 2016

Coastal Management Area Boundary

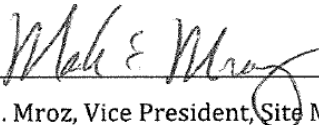
0 0.75 1.5 3 mi  
0 1.25 2.5 5 km  
1:72,224



**SECTION L**

**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 who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

  
\_\_\_\_\_  
Mark E. Mroz, Vice President, Site Manager

December 11, 2017  
\_\_\_\_\_  
Date

**SECTION M**

**Page M-1 RESERVED**

**Page M-2 RESERVED**

## **SECTION M**

### **AIR EMISSIONS**

#### **M – 1 SUBPART BB AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS**

The United Initiators Elyria, Ohio facility operates equipment that contains or contacts hazardous waste with organic concentration that equals or exceeds 10 percent by weight as defined in 40 CFR 264.1063(d). Specifically, the feed system from the Boiler Working feed Tank that includes pumps, valves, flanges, and connectors are subject to the 40 CFR 264 Subpart BB air emission standards for equipment leaks. As required in 264.1050(d), each piece of equipment to which this subpart applies is marked in such a manner that it can be distinguished readily from other pieces of equipment. The hazardous waste fuel stream is managed as a light liquid, based on the definition of light liquid service at 40 CFR 264.1031 (at least 20% of the components have a vapor pressure in excess of 0.3 kilopascals at 20° C).

The items to be monitored include pumps, valves, pressure relief devices, and sampling connections. All items to be inspected are tagged to readily distinguish from other pieces of equipment.

All of the monitored items are monitored once each calendar month. In addition, the pump seals are visually inspected weekly for indications of leakage, as indicated in the inspection discussions in Section F of this permit application. Monitoring will be completed using a VOC monitor such as a flame ionization detector or photo ionization detector.

To conform to the Subpart BB regulations, United Initiators conducts the inspection of the monitored equipment at monthly intervals utilizing the procedures set forth in Method 21 of Part 60. Specifically each piece of listed equipment is visually examined monthly (or weekly, for pump seals) for leaks or other indication of leakage. Additionally, each monitored piece of equipment is also examined monthly with a VOC monitor.

VOC monitoring measurements in excess of 10,000 ppmv (500 ppmv for relief devices) above background constitutes a leak. Visual evidence of leakage from monitored equipment requires corrective action, even if there is no indication that the VOC emission exceeded 10,000 ppmv when examined with a VOC monitor. For any leak, corrective action must be initiated within 5 days and completed within 15 days. This corrective action is documented in the facility's hazardous waste operating log. If monitoring does not indicate an emission of 10,000 ppmv above background, the highest emission level measured during the inspection on a piece of equipment is recorded on the inspection form. If there is an



indication of VOC emissions in exceedance of 500-ppmv differential over background VOC levels for any pressure relief device in gas/vapor service, the facility will initiate corrective action within 5 days and repairs will be completed within 15 days. This corrective action will be documented in the facility's hazardous waste operating log.

In the event that corrective action cannot be completed within the 15-day period stated in the regulations, the EHSS&R Manager will monitor the efforts to perform the corrective action and will make every effort to ensure that the delay of repair conforms to the specific allowances in the regulations.

#### M – 2 SUBPART CC AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS

As previously described in Section D – Process Descriptions, United Initiators is not seeking a storage permit for tanks and containers. The Boiler Working Feed Tank and containers will be managed under the less than 90 day accumulation large quantity generator standards. Hazardous waste that is generated on-site is placed into a tank and containers are hazardous waste generated by organic peroxide manufacturing processes. These wastes will be placed into the Boiler Working Feed Tank located in B-4 (Boiler Area) which complies with Tank Level 1 controls as specified in 40 CFR 264.1084(b)(1)(C):

*(C) For a tank design capacity less than 75 m<sup>3</sup>, the maximum organic vapor pressure limit for the tank is 76.6 kPa.*

The Boiler Working Feed Tank volume 1.14 m<sup>3</sup> and will manage waste less than 5.00 kPa.

*(ii) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with paragraph (b)(1)(i) of this section.*

The contents of the hazardous waste in the Boiler Working Feed Tank are chilled by a condenser unit and glycol jacket system that lines the outside of the tank.

*(iii) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in 40 CFR 265.1081.*

No waste stabilization occurs in this tank. The tank is a feed tank to the boiler where the waste is thermally treated.

The Boiler Working Feed Tank is equipped with a fixed roof designed to meet the requirements of 264.1084(c)(2). The fixed roof and its closure devices are designed to form a continuous barrier over the

entire surface area of the hazardous waste in the tank. The fixed roof is installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall. Each opening in the fixed roof is equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device.

The fixed roof and its closure devices are visually inspected to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

In the event that a defect is detected, the owner or operator shall repair the defect the facility will initiate corrective action within 5 days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection. Repair of a defect may be delayed beyond 45 calendar days if the facility determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation. This corrective action will be documented in the facility's hazardous waste operating log.

As described in Section D, containers are typically 300-gallon totes. They are stored in a temperature controlled storage area (B-19). Containers are managed in accordance with Container Level 2 standards. The containers meet U.S. Department of Transportation requirements and operated with no detectable organic emissions. The totes are sent off-site annually for testing using 40 CFR 60, Appendix A, Method 27 testing protocols. Whenever hazardous waste is in the container all covers and closure devices are installed and secured. They are only removed when adding or removing hazardous waste or other material. Containers are visually inspected prior to use and before placing them into the storage area. Storage areas are also inspected weekly as required under the less than 90-day large generator standards.

#### M – 2 Example Inspection forms

Example inspection forms used for Subpart BB & CC monitoring and inspections are provided in Attachment 1 to this section.

**Certification:**

As required 40 CFR 270.27(a)(2), I certify under the penalty of law that the requirements under 40 CFR 264 Subpart CC are met.

A handwritten signature in black ink, appearing to read "Jeff B. Lenchak", written in a cursive style.

Jeffrey B. Lenchak

EHSS & Regulatory Manager

# **ATTACHMENT 1**

## **EXAMPLE INSPECTION FORMS**

## BOILER WORKING FEED TANK ANNUAL INSPECTION

ITEM	PROBLEMS ENCOUNTERED	STATUS OK?	STATUS NOT OK?	OBSERVATIONS	REMEDIAL ACTION NEEDED
TANK COVER	CRACKS, LEAKS, CORROSION, SEAL DAMAGE				

INSPECTOR: \_\_\_\_\_

DATE &amp; TIME: \_\_\_\_\_



## BOILER WORKING FEED TANK PUMP WEEKLY INSPECTION

ITEM	PROBLEMS ENCOUNTERED	STATUS OK?	STATUS NOT OK?	OBSERVATIONS	REMEDIAL ACTION NEEDED
FEED PUMP	LEAKS, CORROSION, SEAL DAMAGE				

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

## BOILER WORKING FEED TANK PUMP AND AGITATOR MONTHLY MONITORING

Instrument Serial Number: \_\_\_\_\_

Background Measurement: \_\_\_\_\_

ITEM	Instrument Reading PPM	REMEDIAL ACTION NEEDED
FEED PUMP		
BOILER WORKING FEED TANK AGITATOR		

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

## BOILER FEED SYSTEM SUBPART BB MONITORING FORM

Instrument Serial Number: \_\_\_\_\_

Background Measurement: \_\_\_\_\_

Item	Source	Instrument Reading PPM	Remedial Action
HV-004-124	Valve		
HV-004-125	Valve		
HV-4119	Valve		
HV-4118	Valve		
HV-4117	Valve		
RD-101.12	Relief Device		
HV-4116	Valve		
XV-101.06	Valve		
RD-101.11	Relief Device		
HV-4115	Valve		
HV-4114	Valve		
HV-4110	Valve		
HV-4108	Valve		
XV-401.31	Valve		

INSPECTOR: \_\_\_\_\_

DATE & TIME: \_\_\_\_\_

## **SECTION N**

### **SITING CRITERIA DOCUMENT**

#### **N - 1 INTRODUCTION**

This Siting Criteria Document is provided in accordance with the requirements of OAC 3745-50-38(A).

The United Initiators Elyria, Ohio facility is a manufacturer of organic peroxides in solid and liquid form, which are sold for use in many industrial processes, including polymerization, chemical synthesis, and modification of polymers. These materials can possess several hazardous characteristics, including flammability, shock sensitivity, and temperature sensitivity. Hazardous wastes are created during the production of these materials primarily from purification processes and from cleaning of production tanks and lines between product runs. Permitted hazardous waste treatment occurs in Boiler 2, the hazardous waste fuels boiler.

#### **N-2 NATURE AND VOLUME OF WASTE (OAC 3745-50-38(A)(1))**

The hazardous waste that is treated in the on-site hazardous waste fuels boiler consists of a single combined organic peroxide waste stream captured from skim tanks that are built in to the facility's wastewater treatment system. The stream is identified as D001 (ignitable) and D003 (reactive) characteristic hazardous waste. The hazardous waste stream is a liquid with specific gravity < 1.0. No other hazardous waste characteristics or hazardous waste listed waste codes apply to this waste stream.

United Initiators treats up to 8 gallons/hour of this waste by using it as a fuel in Boiler 2 as specified in the Part A Application (see Section A).

All other hazardous wastes generated at the United Initiators Elyria facility are managed as Large Quantity Generator (LQG) wastes in accumulation areas that do not require storage permits. Hazardous wastes are not stored or disposed at the United Initiators Elyria facility. United Initiators does not receive any hazardous wastes from off-site generators.

N-3 COMPLIANCE WITH HAZARDOUS WASTE RULES (OAC 3745-50-38(A)(2))

Ohio Revised Code 3734.12 requires the director of the Ohio EPA to adopt hazardous waste management regulations that are consistent with and equivalent to the regulations adopted under the Resource Conservation and Recovery Act of 1976 (RCRA). Sections A through M of the United Initiators hazardous waste permit renewal application serve to document compliance with the applicable hazardous waste regulations of OAC 3745-50 through 270, and thus with ORC 3734.12.

N-4 EVIDENCE OF MINIMUM ADVERSE ENVIRONMENTAL IMPACT (OAC 3745-50-38(A)(3))

The United Initiators facility is designed, maintained, and operated in such a way as to represent the minimum adverse environmental impact. The facility is graded to convey precipitation away from building structures and to prevent flooding. Roof drains also convey precipitation away from the buildings. Stormwater is discharged to the stormwater sewer system under a general discharge permit.

Wastewaters from the production processes are treated on-site in a series of wastewater treatment tanks (skim tanks) located within a secondary containment system. These tanks were installed in 2010. The upgraded wastewater treatment system is designed to ensure that the wastewaters are managed to greatly reduce the potential for fire and explosion.

N-5 EVIDENCE OF MINIMUM RISK (OAC 3745-50-38(A)(4))

The products manufactured at the United Initiators Elyria facility are organic peroxides, which are considered to be DOT hazardous materials due to reactivity. Because the product materials exhibit reactivity, wastes from production will also exhibit reactivity. United Initiators operates the entire facility to minimize the risk of inadvertent reaction, fire, or explosion in handling of all raw materials, and wastes, both on-site and off-site. All employees and contractors are educated in the safe and proper handling of materials, products, and wastes at the United Initiators facility.

A detailed discussion of the permitted hazardous waste units and operations is provided in Section D of the RCRA permit application. Section F of the permit application describes the preventive procedures in place at the facility. Section G of the application is the facility's Contingency Plan.

Waste treatment operations are limited to the hazardous waste boiler operation and the associated hazardous waste fuel feed tank. This occurs in Building B-4, which is designed to industrial standards and utilizes a variety of engineered controls to minimize release to the environment (e.g., structurally sound building and floors with secondary containment for the hazardous waste fuel feed tank) and to



abate the environmental impact of normal and emergency operations (e.g., fire extinguishers, sprinkler system, alarms, communications equipment, spill response equipment). The facility conducts regular inspections to ensure all equipment is in place, and in good operating condition.

In order to minimize the risk of fire or explosion in the hazardous waste fuel boiler, all hazardous waste fuel is diluted with mineral spirits to achieve 2% active oxygen in the feed stream to the boiler. In addition, the hazardous waste fuel feed to the boiler is limited to a maximum of 8 gallons/hour.

There is no RCRA-permitted container or tank storage at the United Initiators facility. All containers and tanks are managed in accordance with the LQG requirements. Accumulation occurs in buildings with concrete secondary containment to contain any releases, and appropriate controls in the event of fire or explosion. Containers are accumulated on site for no more than 90 days prior to treatment in the on-site hazardous waste boiler, or transfer to an approved off-site hazardous waste treatment, storage, and disposal facility. The LQG accumulation areas (also known as generators 90-day storage areas) for hazardous waste fuels are located within temperature controlled buildings, to minimize the potential for fire or explosion.

The primary risk in the transportation of hazardous wastes from the United Initiators facility is associated with loading and unloading of the hazardous wastes. Other than the hazardous waste fuels (i.e., the skim tank wastes), all hazardous wastes are accumulated in DOT-compliant containers and shipped off-site under hazardous waste manifest via approved hazardous waste transporters. Off-site hazardous waste shipments occur approximately 4 to 5 times per year. In the unlikely event that hazardous waste fuel (skim tank wastes) must also be shipped off-site for disposal, that waste may be transported in either containers or tanker truck. United Initiators sends hazardous wastes only to off-site facilities which are approved hazardous waste treatment, storage, and disposal facilities.

The United Initiators Contingency Plan contains descriptions of the measures in place to protect public health and safety. United Initiators minimizes the potential for unauthorized entry to the active portions of the facility by means of appropriate security measures, as described in Section F of the Permit Application.

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The United Initiators Contingency Plan and Disaster contain descriptions of the measures in place to protect public health and safety. United Initiators minimizes the potential for unauthorized entry to the active portions of the facility by means of appropriate security measures, as described in Section F of the permit application.

N-6 COMPLIANCE WITH APPLICABLE RULES (OAC 3745-50-38(A)(5))

The facility complies with Chapters 3704, 3734, and 6111 of the Revised Code and all rules and standards adopted under them.

ORC 3704 pertains to air pollution control. United Initiators operates in accordance with Ohio Air Permit to Install and Operate, #P0085286. United Initiators is in the process of obtaining a Title V permit for operation of the Hazardous Waste Fuels Boiler.

ORC 3734 pertains to solid and hazardous wastes. United Initiators operates under an Ohio Hazardous Waste Facility Installation and Operation Permit for the treatment of hazardous waste in a hazardous waste fuel boiler. For all other hazardous waste activities at the facility, United Initiators operates as a hazardous waste generator and complies with the hazardous waste LQG regulations.

ORC 6111 pertains to water pollution control. United Initiators operates a wastewater treatment facility which discharges to the City of Elyria wastewater treatment plant under an Industrial Wastewater Discharge Permit. Stormwaters are discharged under the Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (NPDES Permit No. OHR000005).

N-7 COMPLIANCE EXPERIENCE (OAC 3745-50-38(A)(6))

The United Initiators Elyria facility has been in operation since 1965, and has maintained an Ohio Hazardous Waste Facility Installation and Operation Permit since 2002, with periodic modifications. United Initiators is aware of and strives to ensure that all facility operations are conducted in accordance with applicable regulations. The Site Manager and EHSS&R Manager have extensive experience with facility operations and in maintaining environmental compliance. In addition, all personnel involved in hazardous waste activities receive training appropriate to their position and responsibilities.

N-8 FACILITY LOCATION (OAC 3745-50-38(A)(7))

United Initiators is not located within the boundaries of any local, state, or national park or recreation area.