

U.S. ENVIRONMENTAL PROTECTION AGENCY

Superior Barrel and Drum - Removal Update



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject: Removal Update**  
**Approximately 20 Percent of Materials Removed**  
**Superior Barrel and Drum**  
**Elk, NJ**  
**Latitude: 39.6930670 Longitude: -75.1345550**

**From:** Keith Glenn,  
OSC/Environmental Scientist  
**Date:** 3/10/2014  
**Reporting Period:** March 3, 2014 through March  
9, 2014

**FOR PREVIOUS REMOVAL UPDATES, PLEASE CONTACT: [glenn.keith@epa.gov](mailto:glenn.keith@epa.gov)**

**Current Activities**

Removal activities continued with the transport and disposal of bulk flammable liquids. An additional subcontract was awarded for the T&D of combustible materials representing approximately 600 containers. Chemists continued to collect screening samples analyzed by the EPA laboratory in Edison, NJ. Composite samples were collected of suspected chlorinated and peroxide containing materials.

The EPA continued to work with numerous partners including the Gloucester County Fire Marshal's Office, HazMat Team, NJDEP, U.S. Fish and Wildlife Service, and local officials. NJDEP personnel continued weekly visitations and communication with Elk Township officials also continued. Security personnel continued to patrol the site during non-operational hours.

**Response Actions to Date**

To view removal actions completed during other operational periods, please contact Keith Glenn at 732-321-4454 or email: [glenn.keith@epa.gov](mailto:glenn.keith@epa.gov).

Chemists and crew continued to collect samples of materials in the designated "N" series of containers. During the operational period a total of 113 samples were sent to the PHILIS Laboratory located in Edison, NJ for screening analysis of volatile organic compounds (VOCs). Additionally 111 samples were sent to the EPA DESA Laboratory in Edison for screening analysis of heavy metals. Results will aid in the generation of composite samples to better determine disposal options for this series of containers.

On March 5, 2014 approximately 5,000 gallons of flammable liquids, representing 55 containers, was removed by tanker. An additional 4,500 gallons, representing 50 containers, was removed on March 7, 2014.

A subcontract was awarded for the removal of an additional approximately 600 containers located on-site. Combustible materials will be removed once facilities are identified and off-site compliance checks are completed.

RST continued to provide perimeter and spot air monitoring to ensure the safety of personnel and surrounding properties. Additionally, RST continued to manage the SCRIBE and Response Manager databases.

**Progress Metrics**

Waste Stream	Sub-Class	Composite Samples Collected	Amount of Containers in Composite
<b>NEUTRAL</b>			
	N1	1	35
	N2	0	-
	N3a	1	35
	N3b		-
	N4	0	-
	N5	0	-
	N6	0	-
	N7	0	-
<b>FLAMMABLE</b>			
	F1a	1	33
	F1b	1	12
	F1c	1	11
	F1d	1	9
	F1e	1	12
	F1f (Liquid Brown)	1	12
	F1g (Liquid Brown)	1	12
	F1h (Liquid Brown on Water)	1	12
	F1i (Liquid Amber)	1	10
	F1j (Liquid Brown)	1	12
	F1k (Misc. Liquid)	1	12
	F1 Grab	4	*
	F2a (Powder)	1	10
	F2b (Soil)	1	11
	F2c (Solid Chunks)	1	8
	F2d (Gel)	1	3
	F2e (Misc. Solid)	1	6
	F3a (Sludge Red)	1	12
	F3b (Sludge Browns)	1	12
	F3c (Sludge Browns)	1	12
	F3d (Sludge Browns)	1	10
	F3e (Sludge Browns)	1	11
	F3f (Misc. Sludge)	1	12
	F3 Grab	1	*
	F4a (Acid Dark)	1	13
	F4b (Acid Light)	1	5
	F4c (Acid Brown)	1	12
	F4d (Acid Tan)	1	7
	F4e (Acid Sludge)	1	4
	F5a (Base)	1	7
	F6a (Paint Red/Cream)	1	8

	F6b (Paint Blue)	1	12
	F7a (Resin Clear)	1	5
	F7b ( Resin Gray Sludge)	1	4
	F7c (Resin Red Sludge)	1	6
	F7d (Resin Black Liquid)	1	4
	F7e (Resin (Gold)	1	3
	F7f (Resin Brown)	1	5
	F7g (Resin Tan)	1	4
	F7h (Resin Multicolor)	1	7
	F7i (Resin White)	1	3
	F7j (Resin Red)	1	2
	F8a (Adhesive Black)	1	3
	F8b (Adhesive Red Orange)	1	3
	F8c (Adhesive Brown)	1	5
	F8d (Adhesive Green Yellow)	1	5
	F8e (Adhesive Tan)	1	2
	F8f (Adhesive Gray Blue)	1	4
	F8g (Adhesive Red Orange)	1	6
	F8h (Adhesive (Green Gray)	1	9
<b>ACID</b>			
	A1a (pH=4; low viscosity)	1	12
	A1b (pH=4; high viscosity)	1	10
	A1c (pH=3)	1	11
	A1d (Acidic Solids)	1	5
	A1e (pH=1)	1	3
	A1f (pH=2)	1	7
	Grab (difference in properties prevent from bulking)	11	*
	A2a (pH=3-4)	1	11
	A2b (pH=3-4)	1	12
<b>BASE</b>			
	B1a (pH=14)	1	2
	B1b (pH=14)	1	2
	B1c (pH=13)	1	2
	B1d (pH=13)	1	8
	B1e (pH=12)	1	4
	B1f (pH=11)	1	7
	B1g (pH=10)	1	7
	B1h (pH=10)	1	5
	B1i (pH=10)	1	7
	B1j (pH=11)	1	4
	B1k (pH=11)	1	9
	B1l (pH=14)	1	3
	B1m (pH=13)	1	2
	B1n (pH=13)	1	3
	B1o (pH=12)	1	4
	B1p (pH=10)	1	2
	B1q (pH=10)	1	2
	B1 Grab (difference in properties prevent from bulking)	5	*
	B2a (Combustible Low Sludge)	1	11
	B2b (Combustible High	1	10

	Sludge)		
	B2 Grab (Combustible)	3	*
	Composite 23 (General Base Liquid)	1	12
<b>COMBUSTIBLE</b>			
	Composite 1 (Combustible Organic Liquid with Neutral Liquid, Black/Brown)	1	12
	Composite 2 (Combustible Organic Liquid with Neutral Liquid, Brown)	1	12
	Composite 3 (Combustible Liquid with Neutral Liquid, Brown/Tan/Red)	1	12
	Composite 4 (Combustible Liquid with Neutral Liquid, Black/Brown)	1	12
	Composite 5 (Combustible Organic Liquid with Neutral Liquid, Multicolor)	1	12
	Composite 6 (Combustible Solid, Brown/Multicolor)	1	12
	Composite 7 (Combustible Solid, Black/Brown)	1	12
	Composite 8 (Combustible Liquids and Sludges, Black/Brown/Multicolor)	1	12
	Composite 9 (Combustible Liquids, Black/Brown, Multicolor)	1	12
	Composite 10 (Combustible Liquids, Brown)	1	12
	Composite 11 (Combustible Organic Liquids, Brown/Multicolor)	1	12
	Composite 12 (Combustible Liquid Mixtures, Brown/Multicolor)	1	12
	Composite 13 (Combustible Organic Liquid Mixtures, Brown/Multicolor)	1	12
	Composite 14 (Combustible Solids, Black or Brown)	1	12
	Composite 15 (Combustible Solids, Brown/Multicolor)	1	11
	Composite 16 (Combustible Sludges, Brown/Multicolor)	1	12
	Composite 17 (Combustible Solids and Resins, Brown/Multicolor)	1	12
	Composite 18 (Combustible Liquids and Solids, Yellow/Multicolor)	1	12
	Composite 19 (Combustible Liquid/Solid Mixtures, Black/Brown)	1	9
	Composite 20 (Combustible	1	11

	Organic Liquids and Sludges, Multicolor)		
<b>OXIDIZER</b>			
	Composite 21 (Oxidizing Solids)	1	11
<b>CHLORINATED</b>			
	Composite 23 (Chlorinated / PCB)	1	12

\* Grab samples are collected from one container and are not bulked due to unique features.

<i>Date Shipped</i>	<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
1/30/2014	Waste Inorganic Liquid	Liquid Wastes	4,500 gallons (37 containers)	012500207	Solidification (Proposed)	Cumberland County Landfill (Interstate Waste Services), 135 Vaughn Road, Shippensburg, PA 17257
2/6/2014	Waste Flammable Solid	Solid Wastes	982 gallons (7 containers)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/6/2014	Waste Flammable Corrosive, Acidic Solid	Solid Wastes	55 gallons (1 container)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/6/2014	Waste Corrosive, Inorganic, Acidic Liquid	Liquid Wastes	381 gallons (9 containers)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211
2/6/2014	Waste Chromium and Lead Contaminated Solid	Solid Wastes	168 gallons (4 containers)	012500266	Stabilization/ Landfill (Proposed)	Envirosafe Services of Ohio, 876 Otter Creek Road, Oregon, OH 43616
2/6/2014	Waste Mercury Contaminated Corrosive, Inorganic, Acidic Liquid	Liquid Wastes	165 gallons (3 containers)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211
2/6/2014	Waste Corrosive, Acidic Liquid Mixture	Mixed Wastes	92 gallons (2 containers)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211
2/6/2014	Waste Corrosive, Organic, Acidic Liquid	Liquid Wastes	55 gallons (1 container)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211
2/6/2014	Waste Flammable Liquid and Solid Mixture	Solid Wastes	475 gallons (9 containers)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/6/2014	Waste Flammable	Mixed	1,362	012500266	Incineration	Ross Incineration

	Liquid and Solid Mixture	Wastes	gallons (11 containers)		(Proposed)	Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/20/2014	Waste Corrosive, Inorganic, Basic Liquid	Liquid Wastes	1,509 gallons(13 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/20/2014	Waste Corrosive, Selenium Contaminated, Inorganic, Basic Liquid	Liquid Wastes	190 gallons(2 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/20/2014	Waste Corrosive, Lead Contaminated, Inorganic, Basic Liquid	Liquid Wastes	475 gallons(5 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/20/2014	Waste Corrosive, Lead Selenium Contaminated, Inorganic, Basic Liquid	Liquid Wastes	190 gallons(2 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/20/2014	Waste Corrosive, Chromium Selenium Contaminated, Inorganic, Basic Liquid	Liquid Wastes	1,285 gallons (7 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/20/2014	Selenium Contaminated Liquid	Liquid Wastes	1,285 gallons (7 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/20/2014	Waste Corrosive, Organic, Basic Liquid	Liquid Wastes	285 gallons(3 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464
2/27/2014	Waste Flammable, Chloroform Contaminated	Liquid Wastes	1270 gallons (10 containers)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/27/2014	Benzene Contaminated Liquid	Liquid Wastes	1840 (9 Containers)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/27/2014	Waste Corrosive, Organic, Basic Liquid	Liquid Wastes	95 gallons (1 Container)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/27/2014	Lead Contaminated Liquid	Liquid Wastes	250 gallons (1 container)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
2/28/2014	Waste, Flammable Liquid	Liquid Wastes	4700 gallons(24	11519302	Incineration (Proposed)	Ross Incineration Services, Inc.,

			containers)			36790 Giles Road, Grafton, OH 44044
3/5/2014	Waste, Flammable Liquid	Liquid Wastes	5000 gallons(55 containers)	11519349	Incineration (Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044
3/7/2014	Waste, Flammable Liquid	Liquid Wastes	4,500 gallons(50 containers)	11519380	Incineration(Proposed)	Ross Incineration Services, Inc., 36790 Giles Road, Grafton, OH 44044

### Planned Response Activities

Collaboration between the EPA, NJDEP, FWS, County, and local officials will continue throughout the removal activities of the Superior Barrel and Drum Site.

Additional screening samples will be collected and sent to the PHILIS and Region 2 DESA Laboratory for VOC and heavy metal analysis. The results will enable onsite managers and chemists to develop a more efficient composite sample design for this material. Personnel will continue to prepare containers for disposal.

Waste profiles will be generated in the next operational period for the combustible materials listed on the newly awarded subcontract. Following such, disposal facilities will be selected and off-site compliance checks will be conducted. The next disposal event will occur after this is completed.

RST will continue to work with the EPA on the development of a Common Operational Picture (COP) utilizing FlexViewer. RST personnel will continue perimeter air monitoring.

Additional action items that will be addressed include the propane tanks, container destruction, inspection of potentially buried underground storage tanks and drums, and collection of additional multi-media samples.

### Issues

Site operations were limited on March 3, 2014 due to adverse winter weather conditions.