

U.S. ENVIRONMENTAL PROTECTION AGENCY

Superior Barrel and Drum - Removal Update



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject: Removal Update**  
**Composite Sample Collection and Gas Cylinder Removal Complete**  
**Superior Barrel and Drum**  
**Elk, NJ**  
**Latitude: 39.6930670 Longitude: -75.1345550**

**From:** Margaret Gregor,  
OSC/Environmental Scientist  
**Date:** 4/15/2014  
**Reporting Period:** April 7, 2014 through April 13,  
2014

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

**Current Activities**

Removal of waste under the second subcontract continued during the operational period with the transportation and disposal (T&D) of flammable materials including liquids, sludges, solids, resins and adhesives. The remaining on-site gas cylinders were shipped off-site. Chemists completed the collection of composite samples from the N-series (neutral) waste; composite samples for all on-site materials have now been collected, and no additional composite sample collection is anticipated.

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).

On April 8, 9 and 10, 2014, flammable and/or corrosive wastes were shipped off-site for proper treatment and disposal. A total of 20,320 gallons of waste from 136 containers were removed from the site within the operational period. Flammable liquids were bulked via collection by tanker truck. Sludges from the bottoms of the containers which had held the flammable liquids were consolidated into DOT-shippable totes for removal. Following removal of containers,

crew focused on preparing the remaining containers slated for removal under subcontract 2 for shipment. Site management continued to generate, review and approve waste profiles for the release of materials to various disposal facilities.

In addition to removal of site wastes, on April 8, 2014, Suburban Propane removed the remaining three 1,000-gallon propane cylinders from the site for recycling. All gas cylinders have now been removed from the site.

Chemists completed collecting the remaining composite samples from the N-series (neutral) waste. Composite samples have now been collected for all on-site wastes for disposal purposes, and no further composite sampling is anticipated. Chemists and site management are reviewing composite sample results and have begun preparing an Invitation for Bid/Request for Proposal for the remaining on-site materials. An Invitation for Bid/Request for Proposal for the removal of non-hazardous debris was also sent out.

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>			
	<b>N1</b> (Composites N1, 47 NL, 49 NL and 50 NL)	4	185 (35, 50, 50 and 50, respectively)
	<b>N2</b> a, b, and c (Composite 44, 45, and 46)	3	106 (35, 35, and 36 respectively)
	<b>N3</b> a	1	35
	<b>N3</b> b (Composite 43)	1	35
	N4	0	-
	<b>N5</b> a & b (Composite 33 and 34)	2	78 (39 and 39)
	<b>N6</b> a, b, c, d, e (solids), f (liquids) (Composites 35, 36, 37, 38, 39, and 40)	6	198 (34, 35, 34, 32, 27, and 36 respectively)
	<b>N7</b> (Composite 41)	1	20
	<b>N8</b> (Composite 42)	1	21
	<b>N1, N3</b> (Composite 48 NL)	1	50 (45 N1 + 5 N3)
	<b>N1, N2, N3, N4</b> (Composite 51 OL)	1	35 (28 N1 + 1 N2 + 5 N3 + 1 N4)
	<b>N1, N2, N3</b> (Composite 52 NLm)	1	34 (18 N1 + 13 N2 + 3 N3)
	<b>N1, N2, N4</b> (Composite 53 NL)	1	50 (34 N1 + 1 N2 + 15 N4)
	<b>N1, N2, N3, N4</b> (Composite 54 OL)	1	35 (1 N1 + 32 N2 + 1 N3 + 1 N4)
	<b>N2, N4</b> (Composites 55 NL, 60 OL and 61 OL)	3	50 (24 NL + 26 N4), 33 (1 N2 + 32 N4) and 20 (2 N2 + 18 N4), respectively
	<b>N1, N4</b> (Composites 56 NL, 57 NL and 58 NLm)	3	47 (3 N1 + N4), 15 (4 N1 + 11 N4) and 15 (4 N1 + 11 N4)
<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
Composite 24 (Flammable Sludge)	1	11
Composite 25 (Flammable Liquid)	1	9
Composite 28 (Flammable Paint and Adhesive)	1	9
Composite 29 (Flammable Liquid)	1	6

<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
	Composite 26 (Flammable Acid)	1	13
<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 Sludge)	1	10
	B2 Grab (Combustible)	3	*
	Composite 23 (General Base Liquid)	1	12
	Composite 27 (Flammable Base)	1	9
<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 Organic Liquids and Sludges, Multicolor)	1	11
	Composite 32 (Combustible Sludge)	1	9
<b>OXIDIZER</b>			
	Composite 21 (Oxidizing Solids)	1	11
	Composite 30 (Oxidizing Organic Liquid on Water)	1	8
<b>CHLORINATED</b>			
	Composite 23 (Chlorinated / PCB)	1	12
<b>WATER REACTIVE</b>			
	Composite 31 (Water Reactive)	1	7

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

<b>Date Shipped</b>	<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal Facility</b>
1/30/2014	Waste Inorganic Liquid	Liquid Wastes	4,500 gallons (37 containers)	012500207	Solidification (Proposed)	Cumberland County Landfill (Interstate Waste Services)
2/6/2014	Waste Flammable Solid	Solid Wastes	982 gallons (7 containers)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc.
2/6/2014	Waste Flammable Corrosive, Acidic Solid	Solid Wastes	55 gallons (1 container)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc.
2/6/2014	Waste Corrosive, Inorganic, Acidic Liquid	Liquid Wastes	381 gallons (9 containers)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc.
2/6/2014	Waste Chromium and Lead Contaminated Solid	Solid Wastes	168 gallons (4 containers)	012500266	Stabilization/ Landfill (Proposed)	Envirosafe Services of Ohio
2/6/2014	Waste Mercury Contaminated Corrosive, Inorganic, Acidic Liquid	Liquid Wastes	165 gallons (3 containers)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc.
2/6/2014	Waste Corrosive, Acidic Liquid Mixture	Mixed Wastes	92 gallons (2 containers)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc.
2/6/2014	Waste Corrosive, Organic, Acidic Liquid	Liquid Wastes	55 gallons (1 container)	012500266	Aqueous Treatment (Proposed)	EQ of Detroit, Inc.
2/6/2014	Waste Flammable Liquid and Solid Mixture	Solid Wastes	475 gallons (9 containers)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc.
2/6/2014	Waste Flammable Liquid and Solid Mixture	Mixed Wastes	1,362 gallons (11 containers)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc.
2/20/2014	Waste Corrosive, Inorganic, Basic Liquid	Liquid Wastes	1,509 gallons (13 containers)	12500358	Neutralization/ Landfill	Vickery Environmental, Inc and Max Environmental Technologies, Inc.
2/20/2014	Waste Corrosive, Selenium Contaminated, Inorganic, Basic Liquid	Liquid Wastes	190 gallons (2 containers)	12500358	Neutralization/ Landfill	Max Environmental Technologies, Inc.

2/20/2014	Waste Corrosive, Lead Contaminated, Inorganic, Basic Liquid	Liquid Wastes	475 gallons (5 containers)	12500358	Neutralization/ Stabilization/ Landfill	Max Environmental Technologies, Inc.
2/20/2014	Waste Corrosive, Lead Selenium Contaminated, Inorganic, Basic Liquid	Liquid Wastes	190 gallons (2 containers)	12500358	Stabilization/ Landfill	Max Environmental Technologies, Inc.
2/20/2014	Waste Corrosive, Chromium Selenium Contaminated, Inorganic, Basic Liquid	Liquid Wastes	1,235 gallons (7 containers)	12500358	Neutralization/ Landfill and Deep Well Injection	Vickery Environmental, Inc.
2/20/2014	Selenium Contaminated Liquid	Liquid Wastes	1,285 gallons (7 containers)	12500358	Neutralization/ Landfill	Max Environmental Technologies, Inc.
2/20/2014	Waste Corrosive, Organic, Basic Liquid	Liquid Wastes	285 gallons (3 containers)	12500358	Neutralization/ Stabilization/ Landfill	Max Environmental Technologies, Inc.
2/27/2014	Waste Flammable, Chloroform Contaminated	Liquid Wastes	1270 gallons (10 containers)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc.
2/27/2014	Benzene Contaminated Liquid	Liquid Wastes	1840 (9 Containers)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc.
2/27/2014	Waste Corrosive, Organic, Basic Liquid	Liquid Wastes	95 gallons (1 Container)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc.
2/27/2014	Lead Contaminated Liquid	Liquid Wastes	250 gallons (1 container)	12500457	Incineration (Proposed)	Ross Incineration Services, Inc.
2/28/2014	Waste, Flammable Liquid	Liquid Wastes	4700 gallons (24 containers)	11519302	Incineration (Proposed)	Ross Incineration Services, Inc.
3/5/2014	Waste, Flammable Liquid	Liquid Wastes	5000 gallons (55 containers)	11519349	Fuel Blending/ Incineration, Ultrafiltration, Chemical Precipitation and Carbon Absorption	Tradebe Treatment and Recycling Northeast LLC
3/7/2014	Waste, Flammable Liquid	Liquid Wastes	4,500 gallons (50 containers)	11519380	Fuel Blending/ Incineration, Ultrafiltration, Chemical Precipitation and Carbon Absorption	Tradebe Treatment and Recycling Northeast LLC
3/20/2014	Propane	Liquid Propane	10 cylinders	WO#0472701	Recycling	Suburban Propane

2/28/2014	Flammable Liquid, Corrosive, UN2924, NOS, 3, II	Liquid Waste	1250 gallons (4 containers)	12224910	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
2/28/2014	Flammable Liquids, UN1993, NOS, 3, II	Liquid Waste	1200 gallons (9 containers)	12224910	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
3/28/2014	Flammable Paint Related Materials, UN1263, 3, II	Liquid Waste	1200 gallons (2 containers)	12224910	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
3/28/2014	Flammable Solids, NOS, 4.1, II (Resins, Paint Pigments)	Solid Waste	1250 gallons (2 containers)	12224910	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
3/31/2014	Flammable Liquid, Corrosive, UN2924, NOS, 3, II	Liquid Waste	2090 gallons (38 containers)	12224914	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
3/31/2014	Flammable Liquids, UN1993, NOS, 3, II	Liquid Waste	80 gallons (4 containers)	12224914	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
3/31/2014	Paint Related Materials, UN1263, 3, II	Liquid Waste	216 gallons (10 containers)	12224914	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
3/31/2014	Corrosive Liquids, Basic, Inorganic, UN3266, NOS, 8, II	Liquid Waste	110 gallons (2 containers)	12224914	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/3/2014	Paint Related Materials, UN1263, 3, II	Liquid Waste	1445 gallons (17 containers)	12224943	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/3/2014	Flammable Liquids, UN1993, NOS, 3, II	Liquid Waste	3690 gallons (42 containers)	12224943	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/4/2014	Flammable Liquids, UN1993, NOS, 3, II	Mixed Waste	1530 gallons (18 containers)	12224944	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/4/2014	Flammable Solids, NOS, 4.1, II (Resins, Paint Pigments)	Solid Waste	2890 gallons (36 containers)	12224944	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/4/2014	Hazardous Waste Liquids, NA3082, NOS, 9, III	Liquid Waste	760 gallons (8 containers)	12224944	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/8/2014	Flammable Chromium, Lead and	Liquid Waste	3366 gallons (35 containers)	12224919	Fuel Blending (Proposed)	Veolia Environmental Services



	Chloroform Contaminated Liquid/Water Mixture					
4/8/2014	Propane	Liquid Propane	3 cylinders	WO#0472701	Recycling	Suburban Propane
4/9/2014	Flammable Resin Sludge	Mixed Waste	765 gallons (9 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Lead and Chromium Contaminated Liquid/Water Mix	Liquid Waste	85 gallons (1 container)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Lead Contaminated Resin Solids	Solid Waste	1200 gallons (4 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Resin Solids	Solid Waste	1500 gallons (5 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Adhesive	Mixed Waste	170 gallons (2 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Adhesive	Mixed Waste	680 gallons (8 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Adhesive	Mixed Waste	255 gallons (3 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Flammable Liquid	Liquid Waste	265 gallons (3 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/9/2014	Class 4.1 Flammable Solids	Solid Waste	6300 gallons (21 containers)	12224953	Fuel Blending (Proposed)	Cycle Chem/Clean Ventures Inc.
4/10/2014	Flammable Chromium, Lead and Chloroform Contaminated Liquid/Water Mixture	Liquid Waste	2800 gallons (45 containers)	12224950	Fuel Blending (Proposed)	Veolia Environmental Services

DISPOSAL FACILITY	ADDRESS
Cycle Chem/Clean Ventures Inc.	550 Industrial Drive, Lewisberry, PA 17339
Cumberland County Landfill (Interstate Waste Services)	135 Vaughn Road, Shippensburg, PA 17257
Envirosafe Services of Ohio	876 Otter Creek Road, Oregon, OH 43616
EQ of Detroit, Inc.	1923 Frederick Street, Detroit, MI 48211
Max Environmental Technologies, Inc.	Road #1, Yukon, PA 15698
Ross Incineration Services, Inc.	36790 Giles Road, Grafton, OH 44044
Suburban Propane	997 N. Pearl Street, Bridgeton, NJ 08302
Tradebe Treatment and Recycling Northeast LLC	136 Gracey Avenue, Meriden, CT 06451
Veolia Environmental Services	125 Factory Lane, Middlesex, NJ 08846
Vickery Environmental, Inc.	3956 State Route 412, Vickery, OH 43464

## **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.

It is anticipated that transportation and disposal of all remaining wastes included in subcontract 2 will be completed in the next operational period. Materials will continue to be removed from the site and be transported to appropriate disposal facilities approved through the OSR process. Additional waste profiles will be generated, reviewed, and approved for the continuance of material disposal. An Invitation for Bid/Request for Proposal for T&D contract 3 will also be sent out.

RST will start to work with the on-scene coordinators to generate a comprehensive sampling plan that will specify soil, surface water, ground water and sediment sampling locations. Sediment sampling may take place first, while vegetation is still relatively sparse.

RST will continue to work with 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 container destruction, inspection of potentially buried underground storage tanks and drums, and collection of additional multi-media samples.

The site will be closed during the week of April 21, 2014. 24-hour security will be provided during this time frame.