U.S. ENVIRONMENTAL PROTECTION AGENCY

Superior Barrel and Drum - Removal Update

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: Removal Update
Consultation with Natural Resource Trustee
Superior Barrel and Drum
Elk, NJ
Latitude: 39.6930670 Longitude: -75.1345550

From:	Keith Glenn, OSC/Environmental Scientist
Date:	3/17/2014
Reporting Period:	March 10, 2014 through March 16, 2014

FOR PREVIOUS REMOVAL UPDATES, PLEASE CONTACT: glenn.keith@epa.gov

Current Activities

No removal of wastes were conducted in the operational period, instead managers focused on the plan for the next stage of waste removal. Chemists focused on the collection of the last remaining composite samples for hazardous wastes. Inspections of a ground water well concluded that it was sealed and abandoned. Meetings with the Natural Resource Trustees allowed for determining sampling needs for potential damages to the wetlands.

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.

Following the removal of bulk flammable liquids during the last operational period, personnel focused on the transfer and consolidation of flammable sludge, solids, and residual materials left on the bottom of the drums and totes. It has been found that a majority of these containers contain debris including plastic bottles, tote tops, car parts, oil filters, wood, wire, electrical components, etc. All materials are being consolidated into totes for future disposal.

On March 10, 2014 site hours were reduced to reflect a change in operational status. The amount of ERRS personnel was also reduced. However, operations continued including an investigation of a ground water well. The well was able to be opened but concrete was found at 4-feet below the top-of-casing. No water was visible or able to be reached.

A meeting was held with the Natural Resource Trustee on March 11, 2014. Although the EPA has been in consultation with Fish and Wildlife since discovery, personnel visited the site and federally designated wetland. Areas of concern were surveyed for endangered species known to be located in the wetland. FWS and the EPA discussed a sampling strategy that would determine any potential impacts to the natural resources. Sediment samples will be collected in the wetlands when the comprehensive sampling event is conducted in the future.

Chemists reviewed the HazCat data to complete the collection of composite samples for materials that were flammable, oxidizers, corrosive, and water reactive. These samples were sent to the contracted laboratory for analysis, which will be used for determining disposal options. Additionally, chemists conducted numerous bench-scale tests of materials that will be bulked, as identified in the next subcontract. An addendum was sent to all vendors to include disposal via tanker.

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	CompositeSamples Collected	Amount of Containers in Composite
NEUTRAL			
	N1	1	35
	N2	0	-
	N3a	1	35
	N3b		-
	N4	0	-
	N5a & b (Composite 33 and 34)	2	78 (39 and 39)
	N6	0	-
	N7	0	-
FLAMMABLE			
	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
ACID			
	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
BASE			
	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
COMBUSTIBLE			
	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
OXIDIZER			
	Composite 21 (Oxidizing Solids)	1	11
	Composite 30 (Oxidizing Organic Liquid on Water)	1	8
CHLORINATED			
	Composite 23 (Chlorinated / PCB)	1	12
WATER REACTIVE			
	Composite 31 (Water Reactive)	1	7

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

Date Shipped	***Waste Stream***	***Medium***	***Quantity***	***Manifest #***	***Treatment***	***Disposal***
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 Wastes	55 gallons (1 container)	012500266	Incineration (Proposed)	Ross Incineration Services, Inc.,

	Solid					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 Liquid and Solid Mixture	Mixed Wastes	1,362 gallons (11 containers)	012500266	Incineration (Proposed)	Ross Incineration 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 Wastes	1,285 gallons (7 containers)	12500358	Deep Well Injection(Proposed)	Vickery Environmental, Inc, 3956 State Route 412, Vickery, OH 43464

	Liquid					
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 containers)	11519302	Incineration (Proposed)	Ross Incineration Services, Inc., 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.

The subcontract for the removal of combustible materials will be awarded at the beginning of the next operational period. Additional screening samples will be collected and sent to the PHILIS and Region 2 DESA Laboratory for volatile organic compound (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.

Samples of “N” series waste will continue to be collected and sent to the laboratory for screening purposes. The OEM PHILIS Laboratory will analyze head-space for the presence of VOCs. The Region 2 DESA Laboratory will screen the

samples for the presence of heavy metals. The results will enable onsite managers and chemists to develop a more efficient composite sample design for this material.

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 the propane tanks, container destruction, inspection of potentially buried underground storage tanks and drums, and collection of additional multi-media samples.