UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: Removal Update
Removal of Corrosive, Inorganic Liquids
Superior Barrel and Drum
Elk, NJ
Latitude: 39.6930670 Longitude: -75.1345550

From:	Keith Glenn, OSC/Environmental Scientist
Date:	2/24/2014
Reporting Period:	February 10, 2014 through February 23, 2014

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

Current Activities

Personnel returned to the site following a week-long holiday ending on President's Day. During the operational period, personnel restored the site to functional order since significant snow fall had occurred. Site members continued to prepare for the transport and disposal of materials by over-packing, cleaning the exterior of containers, and labeling. Numerous containers identified with corrosive liquids were removed from the site and sent to approved disposal facilities. Additionally, samples for screening materials for heavy metals were collected and sent to the Region 2 DESA laboratory for analysis.

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.

On February 18, 2014, site personnel returned to the site following closure for the President's Day Holiday. During the pause of activities, significant snowfall occurred causing accumulations throughout the property. Personnel worked to

uncover containers, moved those in jeopardy of being staged in standing ice/water, and transferred containers to the warming room.

Representatives from a disposal company visited the facility on February 19, 2014 to gauge the operations and materials for disposal. They collected samples for the flammable liquid waste stream in preparation for the removal of materials in a future operational period.

Additional attempts to get Suburban Propane to retrieve their tanks located onsite have ended without action. The EPA has contacted the owner of the five tanks located onsite numerous times since October 2013. Alternatives are being reviewed for the recycling of these tanks.

On February 20, 2014 the removal of 39 containers was completed. These materials were liquid corrosive liquids with an elevated pH. Several were also contaminated with heavy metals, such as lead.

Sixty-seven (67) samples were collected and sent to the DESA laboratory on February 21, 2014. These samples will be screened for heavy metal concentrations using ICP-AES techniques. This method will allow for better defined composite sample generation of the "N" series of containers located onsite.

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
NEUTRAL			
	N1	1	35
	N2	0	-
	N3a	1	35
	N3b		-
	N4	0	-
	N5	0	-
	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
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
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	*
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

* 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	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 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	Liquid Wastes	1,285 (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 (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

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.

Load-out operations will continue in the next operational period with focus on the disposal of flammable materials, compound specific contaminated liquids, and additional organic basic liquid waste. Additional screening samples will be collected and sent to the PHILIS and Region 2 DESA laboratory for VOC and heavy metal analysis. Personnel will continue to prepare containers for disposal. In particular benzene contaminated liquids, lead contaminated liquids, and flammable materials containing chloroform will be removed. The disposal of flammable liquids via tanker is scheduled for the week of March 3.

During the next operational period, site managers will review quotes received for the T&D of combustible materials. A decision will be made on the vendor and a subcontract will be awarded. The EPA will work with the awardee to ensure all sample information is adequate for the disposal or treatment of materials. The EPA will conform to the Off-Site Disposal rule prior to release of constituents. T&D of combustibles is tentatively scheduled to commence the week of March 12.

Collection of composite samples from the remaining waste groups will continue. Abbreviated HazCat field testing of the onsite oxidizers will continue, to determine if the volume for this waste stream can be reduced.

Samples of “N” series waste will 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 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 USTs and drums, and collection of additional multi-media samples.