

Parish Chemical Site
Vineyard, UT
Progress Report # 15
05/19/2014 - 06/01/14

The current effort, many of which are ongoing, will include, but not be limited to the following activities:

- Inspecting the site to verify the integrity of facility
- Determining the volumes of hazardous substances
- Segregating incompatible chemicals and establishing proper storage issues throughout the site
- Hazard categorizing known and unknown products, intermediates and wastes
- Transferring the contents of tanks and drums for bulk waste shipments
- Transporting manifested wastes for disposal
- Decontaminating the Parish facility and equipment as necessary to prevent further release of hazardous substances;
- Stabilizing the organic solvent containers (i.e. ethyl ether), that are capable of forming explosive peroxides or “high hazard” chemicals;
- Evaluation of compressed gas cylinders located on site.

Current Activities

During the time period covered by the report, May 19 to June 1, 2014, the following site activities were conducted:

- START continued to Hazcat samples from the analytical lab. ERRS proceeded to lab pack the analytical lab. Estimated 99.7% complete.
- Hazardous waste removal from the mezzanine level was completed as containers were taken and bulked/lab packed.
- ERRS continued segregating waste streams, marking identified drums, segregating drums according to compatible waste characteristics, supporting START sampling activities, lab packing drums and organizing the site.
- START stabilized 19 peroxide forming chemicals from the refrigerator in the R&D lab without incident.
- START performed preliminary safety evaluations on 11 full sized compressed gas cylinders located in the drum yard. Preliminary identification of methyl chloride, propane, sulfur dioxide, hydrogen chloride, anhydrous ammonia, chlorine, and phosgene.
- START performed a site safety familiarization tour for the Orem Fire Department Hazmat Team, and provided training on instrument use and identification using live chemicals from the site.
- START performed bench-scale testing for peroxide reduction in (10) 55 gallon drums, and (2) 300 gallon totes. Peroxides were successfully reduced.

- ERRS continued to stage characterized wastes streams in areas at the north and south areas of the site.
- ERRS completed lab packing the R&D lab and analytical lab.
- START continued to perform waste characterization on sampled containers for waste stream categorization. To date START has sampled and categorized 1,863 drum yard samples, 2,677 small containers from the laboratories, 10 production area samples and 7 samples from the mezzanine.
- (17) DOT Spec 39 NRC compressed gas cylinders were rendered-safe, 4 were flared prior to render-safe procedures, all 17 have been deemed non-pressurized and open to the atmosphere. They will be disposed of as scrap metal.
- Deactivation of 6,457 vials originating in the analytical lab according to pH.
- Chemical reactor process-flow was reviewed for connectivity/continuity, and the results of line tracing and breaking recommendations reported to the OSC.

Data Management

START implemented the USEPA Response Manager (RM) software to manage waste, hazcating, and disposal data for the site work. The current status of RM at the site is:

- RM is being used to record hazardous waste disposal information for materials on-site in real-time.
- Container and waste characterization information is being recorded and reported utilizing a Filemaker pro app on a tablet (iPad). The data is being exported and readily accessible for importation into RM. A server has been used to copy the characterization / container database on the iPad to an offsite, project-specific ftp site for daily archiving.
- As of June 01, 2014, ERRS has identified 90 waste-streams from characterization
- As of June 01, 2014, seven disposal groups have been partially manifested and shipped offsite, three disposal groups have been completely manifested and shipped offsite, three disposal groups have been awarded and are awaiting disposal, and one disposal group is out for bid.

Disposition of Wastes

As of June 1, 2014, 1,160 drums and 92 totes, and 5,000 gallons of bulk assorted regulated materials have been manifested and shipped offsite, totaling 94,100 gallons.

A number of waste streams have been identified, including non-flammable halogenated solvents (methylene chloride), flammable solvents, flammable and non-flammable corrosive liquid acids and oxidizers (solid and liquid). The following tables present the waste streams identified as of June 1, 2014, which have been shipped, which were awarded for disposal and are awaiting pickup, and which are out for bid by ERRS.

Containers Removed from Site (Most of TD1 and TD2; Parts of TD3, TD6, TD7, TD10; all of TD4, TD5, TD8)		
Waste Stream	Quantity	Container Type
UN 1090, Acetone	5	Drum
UN 1120, Butanols	6	Drum
UN 1454, Calcium Nitrate	2	Drum
UN 2668, Chloroacetonitrile	1	Drum
UN 2018, Chloroanilines	1	Drum
NA 1993, Combustible Liquid, n.o.s.	26	Drum
NA 1993, Combustible Liquid, n.o.s.	6	Drum
UN 3264, Corrosive Liquid, Acidic, Inorganic, n.o.s.	86	Drum
UN 3264, Corrosive Liquid, Acidic, Inorganic, n.o.s.	8	Overpack
UN 3265, Corrosive Liquid, Acidic, Organic, n.o.s.	41	Drum
UN 3266, Corrosive Liquid, Basic, Inorganic, n.o.s.	6	Drum
UN 3266, Corrosive Liquid, Basic, Inorganic, n.o.s.	1	Overpack
UN 3266, Corrosive Liquids, Basic, Inorganic, n.o.s.	1	Tote
UN 3267, Corrosive Liquid, Basic, Organic, n.o.s.	2	Drum
UN 3267, Corrosive Liquid, Basic, Organic, n.o.s.	2	Tote
UN 2922, Corrosive Liquids, Toxic, n.o.s.	56	Drum
UN 1148, Diacetone Alcohol	1	Drum
UN 1916, Dichlorodiethyl Ether	4	Drum
UN 1593, Dichloromethane	22	Drum
UN 2023, Epichlorohydrin	2	Drum
UN 2924, Flammable Liquids, Corrosive, n.o.s.	65	Drum
UN 1993, Flammable Liquids, n.o.s.	190	Drum
UN 1993, Flammable Liquids, n.o.s.	4	Overpack
UN 1993, Flammable Liquids, n.o.s.	15	Tote
NA 3082, Hazardous Waste, Liquid, n.o.s.	150	Drum
NA 3082, Hazardous Waste, Liquid, n.o.s.	4	Overpack
UN 1788, Hydrobromic Acid	2	Drum
UN 2014, Hydrogen Peroxide	1	Drum

UN 1791, Hypochlorite Solutions	10	Drum
UN 3246, Methanesulfonyl Chloride	4	Drum
Non-DOT/RCRA Regulated Liquid	175	Drum
Non-DOT/RCRA Regulated Liquid	56	Drum
Non-DOT/RCRA Regulated Liquid	18	Tote
Non-DOT/RCRA Regulated Solids	21	Drum
UN 3139, Oxidizing Liquid, n.o.s.	43	Drum
UN 3139, Oxidizing Liquid, n.o.s.	1	Overpack
UN 3139, Oxidizing Liquid, n.o.s.	2	Tote
UN 3098, Oxidizing Liquid, Corrosive, n.o.s.	18	Drum
UN 1479, Oxidizing Solids, n.o.s.	4	Drum
UN 1805, Phosphoric Acid	2	Drum
UN 1486, Potassium Nitrate	1	Drum
UN 2796, Sulfuric Acid	1	Drum
UN 2810, Toxic Liquids, Organic, n.o.s.	2	Drum
UN2383, Dipropylamine	1	Drum
UN2811, Toxic Solid Organic	1	Drum
UN1618, Acetonitrile	4	Drum
UN2387, Fluorobenzene	1	Drum
UN1105, Pentanols	1	Drum
UN3295, Hydrocarbons, liquid	1	Drum

Awarded, Awaiting Pickup (Miscellaneous drums from TD1, TD2, TD3, TD6, TD7; all of TD9, TD10, TD11)

Waste Stream	Quantity	Container Type
UN 2218, Acrylic Acid	1	Drum
NA 1993, Combustible Liquids, n.o.s.	19	Drum
NA 1993, Combustible Liquids, n.o.s.	0	Overpack
NA 1993, Combustible Liquids, n.o.s.	1	Tank
NA 1993, Combustible Liquids, n.o.s.	1	Tote
UN 3264, Corrosive Liquids, Acidic, Inorganic, n.o.s.	13	Drum
UN 3264, Corrosive Liquids, Acidic, Inorganic, n.o.s.	9	Tote
UN 3266, Corrosive Liquids, Basic, Inorganic, n.o.s.	6	Drum
UN 3266, Corrosive Liquids, Basic, Inorganic, n.o.s.	2	Overpack
UN 3267, Corrosive Liquids, Basic, Organic, n.o.s.	1	Tote
UN 2922, Corrosive Liquid, Toxic, n.o.s.	1	Drum
UN 2922, Corrosive Liquid, Toxic, n.o.s.	2	Overpack
UN 1593, Dichloromethane	2	Drum
UN 1155, Diethyl Ether	1	Drum
UN 2383, Dipropylamine	1	Drum
UN 1170, Ethanol	1	Drum

UN 1993, Flammable Liquid, n.o.s.	10	Drum
UN 1993, Flammable Liquid, n.o.s.	1	Overpack
UN 1993, Flammable Liquid, n.o.s.	11	Tote
UN 1992, Flammable Liquid, Toxic, n.o.s.	1	Drum
UN 1992, Flammable Liquid, Toxic, n.o.s.	1	Overpack
UN 1325, Flammable Solid, Organic, n.o.s.	1	Drum
UN 1325, Flammable Solid, Organic, n.o.s.	1	Tote
UN 1208, Hexanes	1	Drum
Un 1208, Hexanes	1	Tote
UN 3295, Hydrocarbons, liquid, n.o.s.	1	Drum
UN 1230, Methanol	2	Tote
Non-DOT/RCRA Regulated Liquid	34	Drum
Non-DOT/RCRA Regulated Liquid	1	Overpack
Non-DOT/RCRA Regulated Liquid	1	Tank
Non-DOT/RCRA Regulated Liquid	40	Tote
Non-DOT/RCRA Regulated Solid	90	Drum
Non-DOT/RCRA Regulated Solid	9	Overpack
Non-DOT/RCRA Regulated Solid	1	Tote
UN 3139, Oxidizing Liquid, n.o.s.	1	Tank
UN 3139, Oxidizing Liquid, n.o.s.	5	Tote
UN 3139, Oxidizing Liquid, n.o.s.	9	Drum
UN 3098, Oxidizing Liquid, Corrosive, n.o.s.	6	Drum
UN 3098, Oxidizing Liquid, Corrosive, n.o.s.	3	Tank
UN 2789, Acetic Acid, Glacial	1	Drum
UN 1715, Acetic Anhydride	1	Drum
UN 2218, Acrylic Acid	1	Drum
UN 2346, Butanedione	1	Drum
UN 1120, Butanols	1	Drum
UN 3409, Chloronitrobenzene, Liquid	2	Drum
UN 1759, Corrosive Solids, n.o.s.	4	Overpack
UN 2265, N,N-Dimethylformamide	2	Drum
UN 1193, Ethyl Methyl Ketone	1	Drum
UN 2924, Flammable Liquids, Corrosive, n.o.s.	2	Drum
UN 2924, Flammable Liquids, Corrosive, n.o.s.	2	Overpack
UN 2209, Formaldehyde	5	Drum
UN 1206, Heptanes	1	Drum
UN 3293, Hydrazine, aqueous solution	3	Drum
UN 1235, Methylamine, Aqueous Solution	2	Drum
UN 1479, Oxidizing Solids, n.o.s.	2	Drum
UN 2821, Phenol Solutions	1	Drum

UN 1296, Triethylamine	3	Drum
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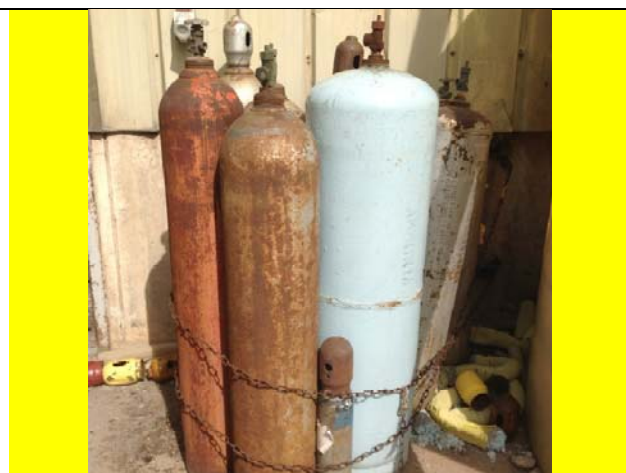
RFQ Out for Bid (TD12, TD13)		
Waste Stream	Quantity	Container Type
NA 1993, Combustible Liquid, n.o.s.	3	Drum
UN 3264, Corrosive Liquid, Acidic, Inorganic, n.o.s.	13	Drum
UN 1993, Flammable Liquids, n.o.s.	10	Drum
Non-DOT/RCRA Regulated Liquid	12	Drum
UN 3098, Oxidizing Liquid, Corrosive, n.o.s.	3	Drum
UN 3139, Oxidizing Liquid, n.o.s.	13	Drum
UN1479, Oxidizing Solid, n.o.s.	5	Drum
UN1325, Flammable Solid, organic nos	26	Drum
UN1307, Xylene	8	Drum
UN2056, Tetrahydrofuran	2	Drum
UN3286, Flammable Toxic Corrosive Liquid	12	Drum
UN3267, Corrosive Liquid, Basic, Organic	16	Drum
UN1993, Flammable Liquid	12	Drum
NA3082, Hazardous Waste Liquid	1	Drum
UN3293, Hydrazine	1	Drum
UN1498, Sodium Nitrate	1	Drum
UN1500, Sodium Nitrite	1	Drum
UN2925, Flammable Corrosive Acidic Solid	2	Drum
UN3085, Oxidizing Corrosive Basic Solid	7	Drum
UN3295, Hydrocarbons	3	Drum
UN2924, Flammable Liquid, Corrosive	1	Drum
UN1358, Zirconium Powder	1	Drum
UN3260, Corrosive Solid Acidic	6	Drum
UN3262, Corrosive Solid Basic	2	Drum
UN2811, Toxic Solids, Organic	1	Drum
Non DOT/RCRA Regulated Solid	22	Drum
UN3077 Environmentally Hazardous Substance Solid	2	Drum
UN3263 Corrosive Solid Base Organic	3	Drum
UN3264 Corrosive Liquid Acidic	1	Drum
UN 1578 Chloronitrobenzenes, solid	2	Drum
UN1616 Lead Acetate	1	Drum
UN1823 Sodium Hydroxide Solid	3	Drum
UN3335 Aviation Regulated Solid	3	Drum
UN2923 Corrosive Solid Toxic	1	Drum
UN3399 Organometallic Water Reactive Toxic Liquid	4	Drum

UN1744 Bromine	2	Drum
UN1410 Lithium Aluminum Hydride	8	Drum
UN1390 Alkali Metal Amides	3	Drum
UN 1415 Lithium	2	Drum
UN3206 Potassium t-Butoxide	6	Drum
UN1396 Aluminum Powder	2	Drum
UN1807 Phosphorous Pentoxide	1	Drum
UN1813 Potassium Hydroxide Solid	5	Drum
UN1687 Sodium Azide	1	Drum
UN1427 Sodium Hydride	5	Drum
UN1428 Sodium	6	Drum
UN1431 Sodium Methylate	12	Drum
UN1710 Trichloroethylene	1	Drum
UN2213 Paraformaldehyde	1	Drum

Site Photos
05/19/14 – 06/01/14



START wearing ballistic level B for peroxide stabilization



Compressed gas cylinders



Loading waste shipment on truck



Stabilized peroxide forming compounds

