U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Parish Chemical Site - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: **POLREP #3**
Initial - Removal #2
Parish Chemical Site
08-X4
Vineyard, UT
Latitude: 40.3000000 Longitude: -111.7339000

To:
From: David Romero, OSC
Date: 10/11/2013
Reporting Period: 2013

1. Introduction

1.1 Background

Site Number:	08-X4	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	9/12/2013
Response Authority:	CERCLA	**Response Type:**	Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	9/23/2013	**Start Date:**	9/23/2013
Demob Date:		**Completion Date:**	
CERCLIS ID:	UTD072988173	**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:		**Reimbursable Account #:**	

1.1.1 Incident Category

Time-Critical Removal Action

1.1.2 Site Description

Parish Chemical was founded in 1972 and began operations at the Site in 1978. Various rooms house a plethora of small and medium-sized containers of (reportedly) at least 15,000 various chemicals/compounds in quantities ranging from 5-3,000 grams. The facility-supplied inventory contained no information about the contents of any inside or outside storage vessels.

EPA Region 8 Emergency Response Program initially responded to 1992 fire which resulted in the evacuation of a ½ mile radius zone around the Site as well as temporary closure of the nearby interstate highway. The fire started in an upstairs laboratory/stockroom and quickly burned out the surrounding area. The burned out area, now referred to as the “veranda,” is open to the elements and located on the 2nd floor in the northeast part of the building. The area is presently used as an open/unenclosed drum and container storage area. A second response action was initiated in 2008 to stabilize Site conditions.

Groundwater beneath the Site during spring and early summer periods rises to the point where infiltration occurs in the impoundments and in building interior sump(s). Preliminary analytical results from groundwater samples collected from perimeter monitoring wells show elevated levels of hazardous substances in shallow groundwater underlying the Site.

In addition to the release of hazardous substance(s) noted above, the improper storage of hazardous materials poses additional threats of release. Hazardous substances are currently being stored at the Site in leaking, deteriorating, and/or mis-labeled tanks, totes and/or drums. Incompatible wastes are currently being stored at unsecured Site locations.

Currently, the Parish facility business is insolvent and has been transferred to a trust for holding until issues are addressed.

1.1.2.1 Location

The approximately 2.5 acre Site is located west of downtown Orem, Utah, around 1.5 miles east of Utah Lake. The area surrounding the Site consists of light residential and industrial businesses. An elementary

school and I-15, a major interstate corridor, are both located within a 1/2 mile radius of the Site. Census data from 2010 describes a population of 6,000 per one mile radius. Locally, extreme temperature variations, hot in the summer and cold in the winter, likely contribute to the physical deterioration of container vessels by expansion and contraction.

1.1.2.2 Description of Threat

Delayed action will increase public health risks because of the potential for fire, explosion, and off-site migration of hazardous substances, contaminants, or pollutants from compromised containers. A catastrophic release could result in migration into soil, water, and air pathways to nearby businesses and residences.

Hazardous substances, as defined by Section 101 (14) of CERCLA and 40 CFR 302.4, have been released or pose a substantial threat of release at the Site. Numerous storage containers and vessels are leaking and/or deteriorating. Data collected at the Site during re-inspection visits in 2009 and 2010 demonstrate the release and substantial threat of release of hazardous substances, pollutants or contaminants. Many of the examples given below are systemic throughout the Site.

- Numerous hazardous materials are stored in drums that, over time, will leak or cause the drum to fail (**solvents** stored in plastic drums outside in winter/summer temperatures). The solvents in the plastic drums will leach out **plasticizers** (unstable degradation product) contributing to eventual drum failure and instability;
- Veranda (partially enclosed area) issues include: containers exposed to outside elements, multiple containers with inadequate or missing labels, old metal drums on pallets below shelving labeled "**poison**" with no dates and no other identification on the label, incompatible **oxidizers** and **corrosives** stored next to each other, incompatible **acids** and flammables stored next to each other, chemicals that have reacted in containers and spilled out onto the shelf or formed crystallized product on container opening (no secondary containment);
- Drum yard (outside open air) issues include: drums improperly stored with unsecured lids, drums bulging from pressure accumulation (potential for drum failure), several dented, pitted, rusted and misshapen drums stored below other heavier drums (potential drum failure and risk of top drums falling);
- Research and Development Laboratory issues include: chemical storage next to electrical panel (fire hazard), shelves containing rusty, leaky containers with chemical incompatibilities present, inadequate labels on containers with no expiration dates;
- Stockroom D issues include: incompatibles stored next to each other (**oxidizers** next to flammables), inorganics and organics stored back to back on shelving with insufficient separation distance (incompatibles), and inadequate labels on containers with no expiration dates;
- Numerous 55 gallon drums throughout the facility (either leaking, crushed, corroded or leaning) with labels containing **hexane/methylene chloride/corrosive acids/oxidizers/flammable liquids/toxic substances** are without secondary containment;
- Numerous containers and/or 55 gallon drums of highly explosive **water reactive material**, labeled as **sodium metal**, are stored within close proximity of leaking piping, faucets and a leaking roof.

The Site's close proximity to an elementary school, residences, businesses and Interstate 15 are of particular concern in the event of fire or catastrophic release of chemicals. In the event of fire, explosion or other release, or the continued migration of hazardous substances that have already been released, the surrounding population could become endangered. Fumes could drift into nearby neighborhoods and businesses and a fire or explosion could present additional complications. Common routes of exposure include fire/explosion and resulting emissions, human contact, and soil contamination with the concomitant threats of ingestion or contamination of groundwater. Leakage from drums and subsequent release into the environment has been observed and inadequate secondary containment poses an additional threat of release. In summary, the Site has an inventory of over 15,000 small to mid-size containers, ranging in quantity from 5-3,000 grams of potential hazardous materials. It also contains 55 gallon drums and large tanks/totes with an estimated 100,000 gallons of hazardous material (**solvents, acids, oxidizers, flammable liquids, corrosives, caustics, and heavy metals**) located in the outside yard subjected to extreme fluctuations of temperature change.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

A TCRA was approved on April 8, 2008, and subsequent response activities commenced on April 10, 2008, (herein referred to as the 2008 Removal Action). The objective of the 2008 Removal Action was to clear and stabilize the Site by removing large quantity containers (hazardous materials such as acids, ethers, oxidizers, corrosives and caustics) and smaller containers (5-3,000 grams of material) that were in the process of failing, leaking or in serious disrepair.

Following the 2008 Removal Action (April 10 through May 2, 2008), the On-Scene Coordinator (OSC) led a joint EPA/state of Utah Department of Environmental Quality (UDEQ) technical team facility re-inspection on May 14, 2009, and July 28, 2010. Based on the findings of the 2009 and 2010 facility re-inspection visits and a separate independent visit performed in 2013 by UDEQ, the OSC noted new and reoccurring concerns from the 2008 Removal Action. These concerns include but are not limited to:

- Appropriate (incompatible) chemical segregation is not maintained throughout the Site (oxidizers stored next to flammables and acids next to flammables);
- Storage of hazardous materials subject to extreme temperature fluctuations (drum yard storage area and the veranda storage area);
- Reoccurring inconsistent and/or non-existent labeling in chemical storage areas throughout the Site;
- Open wiring and and/or ignition sources throughout the Site;

- Storage container deterioration (corroded, leaking, damaged) throughout the Site (several dented and misshapen drums stored below other heavier drums indicating potential drum failure and risk of top drums falling);
- Secondary containment is not present and/or functional in enclosed (cracked vessels with no containment) and outside areas (visual observation staining on the ground beneath a number of drums; indicative of drum leakage to soils);
- Flammable and combustible liquids not stored in an approved flammable liquid storage room; and
- Numerous fire code violations presenting a danger to individuals on-Site, surrounding businesses and residential communities.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

There are no current activities on the Site.

2.1.2 Response Actions to Date

Since a fire incident in 1992, both the UDEQ, EPA RCRA and removal programs have conducted inspections on the Parish Chemical Facility. Both agencies have cited numerous violations that continue to be unaddressed by Parish Chemical Facility. Fire safety inspection reports conducted by Vineyard Fire Prevention Inspector have also cited numerous violations that remain outstanding. Prior actions by EPA's removal program (2008 Removal Action) were to stabilize and clear damaged, pitted, rusted, and compromised containers to prevent any potential release of hazardous materials, pollutants, and/or contaminants into the environment. The objectives cited during the 2008 response proved effective by taking away the threat of release into the environment. Estimated costs during this action were approximated at 1.2 million.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The Site has been transferred from receivership to a trust. The trust has limited finances and cannot contribute to this action.

2.1.4 Progress Metrics

See recent progress reports in the Document Section on the Site Webpage.

2.2 Planning Section

2.2.1 Anticipated Activities

The 2008 removal was focused on Site stabilization by removing and disposing of hazardous substances, pollutants, and/or contaminants, in compromised containers. Since Parish Facility is no longer in operation, the emphasis on this TCRA will be to secure and properly dispose of hazardous substances, pollutants and/or contaminants present at the Site. This task includes, but is not limited to the following: Site security/inspection/assessment; Site stabilization; material identification; management of storage and incompatible hazardous materials; proper transportation and disposal of hazardous materials, pollutants and/or contaminants (products, intermediaries and wastes, as appropriate).

2.2.1.1 Planned Response Activities

This removal action is proposed to start in the summer of 2013. It is anticipated that packaging and removal of the hazardous chemicals will take approximately four months. Disposal will likely take an additional four weeks to arrange, with final disposition occurring shortly thereafter. Completion is expected by March 2014.

The primary objective of this removal action is to secure the Site by removing bulk liquids and solids, over-packing old deteriorating containers, segregating/categorizing incompatible substances, removing, disposing and containing any existing releases. These actions will be performed as necessary to remove the volumes of hazardous substances/waste consistent with any Applicable or Relevant Appropriate Requirements ("ARARs") or To Be Considered ("TBC's") such as guidelines outlined by the 2006 International Fire Codes IFC (2006 Chapter 27 Hazardous Materials, Chapter 34 Flammable and Combustible Liquids, Chapter 35 Water Reactive Substances, Chapter 39 Organic Peroxides, and Chapter 40 Class 3 Oxidizers), where possible. The work includes but may not necessarily be limited to the following:

a. Inspecting the Site to verify the integrity of the facility equipment and determine volumes of hazardous substances;
b. Segregatng incompatible chemicals and addressing proper storage issues throughout the Site; hazard categorizing known and unknown products, intermediaries and wastes; transferring contents of tanks and drums for bulk waste shipments; transporting and disposing of such wastes;
c. Decontaminating the Parish facility/equipment as necessary to prevent further release of hazardous substances to the environment.

2.2.1.2 Next Steps

As yet to be determined, EPA may perform subsequent response activities at the Site to the extent

necessary to protect public health or welfare or the environment and mitigate any additional threat of release of hazardous substances, or threat of release of pollutants or contaminants that may present an imminent and substantial danger to the public health or welfare. Future response activities at the Site may include additional soil and groundwater assessments and activities consistent with the results of the soil, and groundwater investigations.

2.2.2 Issues

No further issues.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	$350,000.00	$0.00	$350,000.00	100.00%
RST/START	$200,000.00	$0.00	$200,000.00	100.00%
Intramural Costs				
USEPA - Direct (Region, HQ)	$480,000.00	$0.00	$480,000.00	100.00%
Total Site Costs	$1,030,000.00	$0.00	$1,030,000.00	100.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.