United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Wednesday, May 16, 2007
From: Michael Sibley II

Subject: Cleanup Oversite Initial & Final
Tulalip Ammunition Storage Depot
Marysville, WA

POLREP No.:	1	**Site #:**	10ZZ
Reporting Period:		**D.O. #:**	
Start Date:	8/16/2006	**Response Authority:**	CERCLA
Mob Date:	8/16/2006	**Response Type:**	Time-Critical
Demob Date:	5/18/2007	**NPL Status:**	Non NPL
Completion Date:	5/31/2007	**Incident Category:**	Removal Assessment
CERCLIS ID #:	10ZZ	**Contract #**	
RCRIS ID #:			

Site Description
To visit this site click on the link below.
http://www.epaosc.net/Tulalipmustardcleanup

The former Tulalip Ammunition Storage Depot (ASD) is located in Marysville, Washington. The site consists of approximately 2,175 acres located within the Tulalip Indian Reservation.

In 1942, the U. S. Government activated the Tulalip ASD for temporary storage of various types of chemical warfare munitions awaiting shipment to overseas destinations. In addition, the U. S. Army (Army) used approximately 1,500 acres for basic military training which included chemical warfare training.

Parsons Infrastructure & Technology Group, Inc. (Parsons) was initially contracted by the U. S. Army Corps of Engineers (USACE) as part of their national program to assess former chemical munitions sites. During the site investigation conducted in 2006, a buried drum was uncovered and several soil samples collected in and around the uncovered drum contained detectable levels of mustard agent. Parsons prepared a Time Critical Removal Action work plan to remove the contaminated soil. Three areas (PW-02, PW-03, and PW-04) covering a total of approximately 0.5 acres were identified as the locations which might contain detectable levels chemical warfare agents in surface and subsurface soil.. In July 2006, the Tulalip Indian Tribe requested assistance from the U. S. Environmental Protection Agency (EPA). The Superfund Technical Assessment and Response Team (START) was tasked by the EPA with document review, oversight of site activities, and collection of split soil samples.

Current Activities
Soil excavation of PW-04 began on August 14, 2006. On August 15, 2006, while excavating PW-04, several broken glass Chemical Agent Identification Set (CAIS) vials were discovered. The chemical warfare agents (CWAs) lewisite, chloropicrin, and mustard agent were detected in the collected soil samples. Since phosgene (a gaseous chemical warfare agent) was historically stored in CAIS vials, Parsons updated their site work and site safety plans to address the contingency of phosgene being present onsite and the field project was postponed until late November 2006.

On December 11, 2006, site removal excavation activities restarted inside a negative-pressure temporary building located over the PW-02 excavation area. Parsons collected soil samples after all metal debris were removed from PW-02 and analyzed the samples on-site for the CWAs mustard agent, lewisite, and chloropicrin using the Edgewood Chemical Biological Center (ECBC) field laboratory. Once CWAs were not detected at the on-site laboratory, samples were analyzed off-site at the ECBC laboratory in Aberdeen, Maryland (subcontracted to the USACE). If any CWAs were detected in soil samples by either the on-site or off-site laboratory, six additional inches of soil were excavated and another soil sample was submitted to the on-site laboratory. On January 8, 2007, ten soil samples were sent to the off-site ECBC laboratory. On January 17, 2007, CWAs were not detected in five of the ten soil samples submitted to the off-site ECBC laboratory, and on January 18, 2007, five soil samples were received by

START for mustard agent, mustard agent derivatives, and Hazardous, Toxic, and Radioactive Wastes (HTRW; chlorinated pesticides, nitroaromatics [explosives], total petroleum hydrocarbons [TPHs], volatile organic compounds [VOCs], and metal) analyses. On January 29, 2007, CWAs were not detected in the soil samples at both on-site and off-site ECBC laboratories. On January 30, 2007, eight soil confirmation samples were received by START for mustard agent, mustard agent derivatives, and HTRW analysis. All thirteen split samples were analyzed by START-subcontracted commercial laboratories for the same parameters as the ECBC laboratory (mustard agent and derivatives and HTRW and none of these contaminants (except for common VOC laboratory contaminants) were detected in the soil samples.

On February 1, 2007, the negative-pressure building was repositioned over excavation areas PW-03 and PW-04. On February 6, 2007, soil excavation of PW-04 started. During the excavation, several broken CAIS vials and metal drums were removed. On February 27, 2007, all metal anomalies were removed from PW-04 and soil samples were collected and sent to the on-site ECBC laboratory. On February 28, 2007, the on-site laboratory did not detect CWAs in the soil samples but an additional six inches of soil was excavated from the areas where the off-site ECBC laboratory detected CWAs. After soil excavation was completed, another set of confirmation samples were collected and sent to the on-site laboratory for CWA analysis. On April 18, 2007, Parsons collected twelve soil confirmation samples. On April 19, 2007, START received six soil samples (one out of every two samples) for mustard agent, mustard agent derivatives, and HTRW analysis. All six split samples were analyzed by START-subcontracted commercial laboratories for the same parameters. The START-contracted laboratory results have not been received.

On March 5, 2007, while awaiting the PW-04 confirmation sample results, the soil excavation of PW-03 was started. During the excavation, several broken CAIS vials and metal drums were removed. On March 15, 2007, all metal anomalies were removed from PW-03 and confirmation samples were collected and sent for off-site ECBC CWA analysis. An additional six inches of soil were excavated from the areas where the off-site ECBC laboratory detected CWAs. After soil excavation was completed, another set of confirmation samples were collected and sent to the on-site ECBC laboratory for CWA analysis. On April 20, 2007, ten soil confirmation samples were collected and on April 23, 2007, START received five soil samples (one out of every two samples) for mustard agent, mustard agent derivatives, and HTRW analysis. All five split samples were analyzed by START-subcontracted commercial laboratories for the same parameters. The START-contracted laboratory results have not been received.

Planned Removal Actions

Parsons personnel are in the process of demobilizing from the site. Parsons does not plan to be finished until the first week of May because of the time it will take to deconstruct the negative-pressured building.

Next Steps

The EPA & START are planning a site visit prior to Parsons demobilization date to collect final field and photographic documentation. The laboratory data from the split samples should be available for data validation in late May 2007. No timeline is available for Parsons' analytical data.

Key Issues

None

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
RST/START	$80,000.00	$75,000.00	$5,000.00	6.25%
CLP	$20,500.00	$17,500.00	$3,000.00	14.63%
Intramural Costs				
USEPA - Direct (Region, HQ)	$6,000.00	$3,500.00	$2,500.00	41.67%
USEPA - InDirect	$4,000.00	$2,000.00	$2,000.00	50.00%
Total Site Costs	$110,500.00	$98,000.00	$12,500.00	11.31%

* 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.

Disposition of Wastes

Parsons will dispose of the containerized waste materials from the excavations in accordance with the approved work plans and this Amendment. These wastes may include CA-contaminated media, hazardous waste, non-hazardous soils and scrap metal, wastes from decontamination procedures, and laboratory wastes generated
onsite by ECBC. Waste containers will be staged, secured, labeled, sampled, and analyzed in accordance with the work plans. A fenced holding area (Drum Staging Area)has been established within the former Tulalip BASD property to securely store containers of waste. RCWM will be placed in the IHF for temporary storage. Section 7 of the Amendment contains the IHF Plan.

Parsons will provide a letter report to the USAESCH identifying containerspecific information, waste descriptions, and associated information needed for disposal. Upon approval from the USACE Contracting Officer, Parsons will arrange with the
disposal contractor and the CENWS representative for approval of the manifest and pickup of the waste for disposal. Disposal records will be obtained documenting final disposition of the waste.

It is anticipated that wastes identified as CA-contaminated will be destroyed by off-site incineration. Other excavated wastes not containing CA will be disposed of as either hazardous waste or solid waste depending on analytical results. The waste disposal contractor for the Tulalip BASD TCRA is Veolia Environmental Solutions. Veolia will use their incinerator in Port Arthur, Texas for destruction of drums of CA-contaminated
media. Non-CA-contaminated wastes will be sent to the Waste Management landfill in Arlington, Oregon.