U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bremerton Auto Wrecking - Gorst Creek Site - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region X

Subject: **POLREP #11**
Continued Excavation, Transportation & Disposal
Bremerton Auto Wrecking - Gorst Creek Site
10GL
Port Orchard, WA
Latitude: 47.5099832 Longitude: -122.7405453

To:
From: Jeffry Rodin, OSC
Date: 8/29/2016
Reporting Period: August 29 - September 10

1. Introduction

1.1 Background

Site Number:	10GL	**Contract Number:**	
D.O. Number:		**Action Memo Date:**	1/20/2016
Response Authority:	CERCLA	**Response Type:**	Non-Time-Critical
Response Lead:	EPA	**Incident Category:**	Removal Action
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	4/11/2016	**Start Date:**	
Demob Date:		**Completion Date:**	
CERCLIS ID:	WAN001002414	**RCRIS ID:**	WAH000048636
ERNS No.:		**State Notification:**	Yes
FPN#:		**Reimbursable Account #:**	

Site Description and Background

Gorst Creek Landfill (GCL) is an unpermitted landfill on the Kitsap Peninsula near Port Orchard (western WA) created in the late 1960s when the property owner at the time began disposing of waste in a deep ravine holding Gorst Creek. The creek was channeled through a culvert along the bottom of the ravine and waste was piled on top of the culvert to fill the ravine. During operation of GCL (1968-1989), local residents and businesses used GCL as a dump. For one year (1969-1970), the U.S. Navy contracted to dispose of all waste from the Puget Sound Naval Station at GCL (est. 93,000 cy).

CGL is currently estimated to contain 150,000 cy of waste. The culvert channeling the creek beneath the landfill has collapsed beneath the weight of the landfill in at least two locations, resulting in the impoundment of the creek upstream of the landfill. During periods of heavy precipitation, impounded water seeps through the landfill releasing contaminants downstream, and occasionally over tops the landfill causing the downstream slope to collapse into the creek, washing waste downstream and presenting a threat to State Highway 3 which is 100 yards downstream. There have been five major slope failures at GCL since 1997, typically associated with periods of heavy precipitation. Contaminants include PCBs, pesticides, SVOCs and metals.

EPA Site History

- 2005 to 2009: EPA conducts site assessments - Site does not list on NPL
- 2009: EPA notifies Navy of liability.
- 2012: EPA proceeds with EE/CA for removal action that proposes three alternatives: (1) replace existing culvert, $3 million; (2) reroute the creek around landfill, $7-8 million; (3) remove landfill and restore ravine and habitat, $30 million.

- 2012: EPA consults with Suquamish on the proposed alternatives. Suquamish raise treaty rights and request that EPA select an alternative to fully restore fish passage and habitat.
- EE/CA alternatives 2 and 3 would address Suquamish fish passage and habitat concerns but EPA lacks funding to implement either action.

RCRA Unilateral Admin. Order (UAO) to U.S. Navy

- EPA Region 10 issues RCRA § 7003 UAO to Navy for disposal of solid waste at GCL in Oct. 2014. UAO made effective by OECA AA in Feb. 2015 following conference with the Navy.

CERCLA Admin. Order on Consent (AOC)

- After UAO issuance of UAO by EPA, Navy negotiates with EPA.
- DOJ, EPA, Navy and ST Trust (owner) negotiate CERCLA AOC to replace UAO.
- AOC requires Navy to fully fund EPA's implementation of EE/CA alternative 3 (landfill removal) and the ST Trust to record environmental covenant that restricts development.

EPA has completed ESA and NHPA consultations.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative/On-Site Activities

Monday, August 29

● ERRS continued to excavate in the landfill and loaded waste into Containment Cells 5 and 6.
● START collected three composite samples from Containment Cell 5. These samples, along with samples from Containment Cell 4 collected on Saturday, were delivered to the off-site laboratory by private courier.
● START collected three post-excavation samples (PE-14, PE-15, and PE-16) from the north slope of the excavated landfill, below AAW and to the east and SE of previous PE samples. Samples were delivered to the off-site laboratory by courier.
● ERRS began to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● The lead START engineer was on site and discussed the draft STORM plan with EPA and ERRS.
● Off-site laboratory results were received for lead air samples collected previously; all results were below site action levels.
● START submitted a weekly equipment report to the OSC, which includes an inventory of assets from the following sources: EPA Region 10 Warehouse, EPA Region 10 Manchester Laboratory, EPA ERT-Las Vegas, EPA ERT-Cincinnati, EPA ERT-New Jersey, USCG Pacific Strike Team, and WA Department of Fish and Wildlife, as well as assets purchased for use by site funds.

Tuesday, August 30

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 7.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 6.
● A load of steel was sent off site today for recycling.
● START collected two more post-excavation samples (PE-17 and PE-18) from the north slope of the excavated landfill. Samples for PCBs were delivered to the off-site laboratory by private courier. Because of a temporary delay with total metals analyses at the local laboratory, these post-excavation samples for metals were shipped via overnight courier to an alternate laboratory. Additionally, START collected a sample of the borrow source material for metals analysis, which was also shipped to the off-site metals laboratory.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● Off-site laboratory results were received for an asbestos air sample submitted for transmission electron microscopy (TEM) analyses; the result was non-detect.
● START shipped air samples collected from August 25–29 for lead and asbestos analyses to the respective off-site laboratories.
● A representative from Washington Ecology's mercury program, who is knowledgeable about PCB regulations, visited the site and received a tour from the OSC.
● A representative from the Kitsap County Parks Department visited the site to assess the recovered pieces of granite for potential re-use at local parks.
● The geotechnical engineer was on site to perform compaction testing of areas being backfilled. The results indicated 90% compaction, which is right at the minimum recommended. The soil moisture was a little less than optimum, so he recommended that ERRS add more water during compaction.
● TCLP volatiles results were received for the drum of resin discovered last week; all results were non-detect.

Wednesday, August 31

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 7 and 8.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cells 6 and 7.
● START collected three composite samples from Containment Cell 6. These samples were delivered to the off-site laboratory by courier.
● START collected two more post-excavation samples (PE-19 and PE-20) from the northwest slope of the excavated landfill. Samples were delivered to the off-site laboratories by private courier and overnight delivery.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● Off-site laboratory results were received for asbestos and lead air samples collected previously; all results were below site action levels.
● Representative of the Kitsap County Public health District visited the site and met with the OSC.
● Several visitors were on site from EPA Region 10 and were given a tour of the removal activities, including the Regional Administrator, the Deputy Regional Administrator, and several office directors. Also attending the site tour were a council member and fisheries biologist from the Suquamish Tribe.

Thursday, September 1

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 8.

● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 7.
● A load of steel and a load of tires were sent off site today for recycling.
● START collected three composite samples from Containment Cell 7, which were delivered to the off-site laboratory by private courier.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● ERRS found a cylinder, suspected of being oxygen, in the landfill. wheb XXXXX1w

Friday, September 2
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 1.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 8.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.
● START and USCG performed air monitoring. Heavy rains and thunderstorms were expected today, so air monitoring was modified. The AreaRAEs ,MultiRAEs, and personal samplers for lead and asbestos were deployed, but the dust monitors (DataRAMs and DustTraks) and stationary air samplers for asbestos and lead were not deployed. Air monitoring results were below action levels and within normal limits.
● START shipped air samples collected from August 30–31 for lead and asbestos analyses to the respective off-site laboratories.
● Green and purple liquids (perhaps antifreeze, or dyes) were discovered in the bottom of the excavation area; START collected samples and performed hazardous categorization testing, and the results indicated no characteristics of hazardous waste.
● Results for the PE samples collected earlier this week began to arrive. The PCB results for one sample (PE-17) was slightly above site screening levels, so plans were made to remove additional soil in that area.
● ERRS secured the site for the Labor Day holiday weekend.

Saturday, September 3
● No work today for the Labor Day holiday weekend.

Monday, September 5
● No work today - Labor Day holiday.

Tuesday, September 6
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 1 and 2.
● ERRS continued to excavate in the landfill and finished loading waste into Containment Cell 8, then began loading waste into Containment Cell 1.
● ERRS continued to load-out steel and tires for transportation to local facilities for recycling.
● START collected three composite samples from Containment Cell 8. These samples were delivered to the off-site laboratory by courier.
● ERRS over-excavated PE17 and PE18 approximately 1 foot due to elevated concentrations of PCBs. This combined post-excavation decision unit, renamed PE21, was screened with the XRF and re-sampled for PCBs and metals.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● START received data for PCBs and metals analysis from post-excavation decision unit PE19 and PE20. Results were below site action levels for contaminants of concern.
● START received data for air samples submitted for lead analysis on August 29. Results were below site action levels.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.

Wednesday, September 7
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 2 and 3.
● ERRS continued to excavate in the landfill and finished loading waste into Containment Cell 1, then began loading waste into Containment Cell 2.
● START performed XRF field screening and collected post-excavation samples from decision unit PE22 for PCBs and metals.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits, with the exception of an LEL alarm in a haul truck in the landfill. START and USCG responded with additional air monitoring instrumentation, and determined that the alarm was an instrument fault. The issue was resolved with a fresh-air calibration.
● START and USCG performed radiation screening in Containment Cell 2 following an EPD alarm reported by the excavator operator. The operator, excavator, material in the cell, and trucks being loaded out were all screened with the Ludlum 19 and 2241-2 with pancake probe. No results above background readings were detected.
● START removed pin flags and stakes from post-excavation decision units along the north slope of the landfill in areas cleared for backfill and regrading. Approximately 84,000 square feet has been cleared for restoration.
● START shipped air samples for lead and arsenic analysis collected September 1-6.

● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.

Thursday, September 8
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 3.
● ERRS continued to excavate in the landfill and load waste into Containment Cell 2.
● ERRS transported a total of 1.3 tons of batteries recovered during the previous four months of site activities to a battery recycling facility in Tacoma.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● The geotechnical engineer was on site to perform compaction testing of areas being backfilled. The initial area tested failed compaction at 89% (minimum recommended compaction is 90%), and 12% moisture, so that area was re-rolled and tested

again. All remaining locations passed at 92 to 95% compaction and 7-10% moisture. Moisture was above ideal content of 5 to 7%, but it had recently rained prior to testing, and the rain occurred after compaction.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.

Friday, September 9
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 4.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 3.
● START collected three composite samples from Containment Cell 2, which were delivered to the off-site laboratory by private courier.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● ERRS processed six obviously empty cylinders for inclusion with scrap metal segregated for recycling.
● START performed weekly SWPPP inspection. Deficiencies were shared with EPA and ERRS for corrective action.
● START received data for PCBs and metals analysis from post-excavation decision unit PE21. Results were below site action levels for contaminants of concern.
● START received data for air samples submitted for asbestos analysis on September 7; all results were below site action levels.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes.

Saturday, September 10
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 5.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cells 3 and 4.
● START and USCG performed air monitoring with AreaRAEs, MultiRAEs, DataRAMs, and DustTraks and collected air samples for asbestos and lead. Air monitoring results were below action levels and within normal limits.
● START and USCG recovered time-lapse cameras from the ravine and Air Station 3, and replaced the batteries and downloaded files.
● ERRS began to mine backfill material from the borrow source near Air Station 3 for reconstruction of the Airport Auto Wrecking property.

2.2 Planning Section

Disposal

Waste will continue to be segregated, staged in stockpiles, and characterized for proper disposal.

Progress

MATERIAL HAULED FROM LANDFILL TO STOCKPILE (Loads)

Day/Date	*Debris/Soil*	*Concrete*	*Steel*	*Tires*	*Debris/Soil Distribution*
Mon, Aug 29	31		1	1	Cell 5 - 12 loads, Cell 6 - 19 loads
Tue, Aug 30	72		2		Cell 6 - 72 loads
Wed, Aug 31	51		1	1	Cell 7 - 51 loads
Thu, Sept 1	44		1		Cell 7 - 37 loads, Cell 8 - 7 loads
Fri, Sept 2	66		2		Cell 8 - 66 loads
Sat, Sept 3					No Activity
Mon, Sept 5					No Activity
Tue, Sept 6	51		2		Cell 8 - 37 loads, Cell 1 - 14 loads
Wed, Sept 7	71				Cell 1 - 71 loads
Thu, Sept 8	83			1	Cell 1 - 8 loads, cell 2 - 77 loads
Fri, Sept 9	82			1	Cell 2 - 11 loads, cell 3 - 71 loads
Sat, Sept 10	32			1	Cell 3 - 21 loads, cell 4 - 11 loads
Subtotal for Reporting Period	**502**	**0**	**9**	**4**	

MATERIAL HAULTED OFF-SITE FROM STOCKPILE TO LANDFILL OR RECYCLING FACILITY (Tons)

Day/Date	*Non-Hazardous Debris/Soil*	*Loads of Non-Hazardous Debris/Soil*	*Hazardous Debris/Soil*	*Loads of Hazardous Debris/Soil*	*Concrete*	*Steel*	*Tires*	*Notes*
Mon Aug 29	1,451.89	45						
Tue, Aug 30	1,703.01	53				18.94		
Wed Aug 31	1,860.10	51						
Thu, Sept 1	1,413.82	44				20.56	20.17	
Fri, Sept 2	1,548.31	49						
Sat, Sept 3	No Activity							
Mon, Sept 5	No Activity							
Tue, Sept 6	1,824.80	55				18.62	31.22	
Wed, Sept 7	1,641.21	50						
Thu, Sept 8	2,119.87	63						1.3 tons Batteries
Fri, Sept 9	2,067	63						
Sat, Sept 10	1,700.42	51						
Subtotal for Reporting Period	**17,438.61**	***524***				***58.12***	**51.39**	**1.3**
Subtotal for All Previous Reporting Periods	**108,666.17**	**3,374**	**1,770.62**	**61**	**4,374.21**	**494.53**	**224.79**	**0**
Total Material Hauled Off Site	**126,104.78**	**3,898**	**1,770.62**	**61**	**4,374.21**	**552.65**	**276.18**	**1.3**

Total Off Site Disposal/Recycling all material to Date
133,079.75 Tons

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5 Safety Officer

An Integrated Health and Safety Plan (HASP) has been developed that combines the ERRS and START safety plans for consistency of response levels, emergency procedures, and other safety issues. Site workers have been briefed on the Integrated HASP, and it is available to everyone on site.

3. Participating Entities

3.2 Cooperating Agencies

EPA Emergency Management Program has been cooperatively working with multiple agencies to develop the removal and restoration plan. The following agencies continue be involved in the review process as the plan is developed to the 90% stage.

Suquamish Tribe

Kitsap Co. Health District

Kitsap Co. Emergency Management

WA State Department of Transportation

WA State Department of Fish & Wildlife

City Of Bremerton

In addition EPA has completed ESA consultation with National Marine fishers Service and USFW, and NHPA consultations with the WA State Historic Preservation office, and Suquamish Tribe.

4. Personnel On Site

For the period of July 6 - 16:

EPA	1-3
USCG	3
START	3-4
ERRS	18

5. Definition of Terms

SWPP – Stormwater Protection Plan

Thalweg – Lowest point in a stream (may or may not coincide with centerline)

6. Additional sources of information

6.1 Internet location of additional information/report

The administrative record for the GCL Removal can be accessed through the following link:

https://semspub.epa.gov/src/collection/10/AR64302

Links for time lapse videos from the Gorst Removal Site:

https://vimeo.com/user54097859

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.