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 #12**
Excavation Hauling and Prep for STORM Plan
Bremerton Auto Wrecking - Gorst Creek Site
10GL
Port Orchard, WA
Latitude: 47.5099832 Longitude: -122.7405453

To:
From: Jeffry Rodin, OSC
Date: 9/12/2016
Reporting Period: 9/12/2016 - 9/24/2016

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, September 12

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 5 and 6.
● ERRS continued to excavate in the landfill and load waste into Containment Cell 4.
● START collected three composite samples from Containment Cell 3. These samples 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.
● START shipped air samples for lead and arsenic analysis collected September 7-10.
● START submitted weekly equipment summary to the OSC.
● START and USCG recovered Brinno time-lapse from base of ravine, and redeployed to AS3 because the previous files in the time-lapse camera at AS3 were corrupted.
● The geotechnical engineer arrived on site to perform compaction testing in areas being backfilled. Most areas tested passed compaction at or above the 90% density specified. Some areas tested failed compaction, so the areas around and surrounding those tests were re-rolled and tested again. All remaining locations passed at 90% or better compaction.
● A visitor arrived on site from Olympic College to view granite and boulders that may be of use to the art department.
● Equipment was delivered to the site, included six routers (for the custom MultiRae Pro setup) and 11 bottles of calibration gas.
● The subcontract street sweeper arrived to clean up Bree Road connecting the haul road to State Highway 3.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes and borrow source material. ERRS also continued to excavate toward the upstream side of the landfill during construction of the temporary stormwater conveyance.

Tuesday, September 13

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 6 and 7
● ERRS continued to excavate in the landfill and finished loading waste into Containment Cell 4.
● ERRS continued to load-out steel for transportation to a local facility for recycling.
● START collected three composite samples from Containment Cell 4. These samples were delivered to the off-site laboratory by private courier.
● START performed XRF field screening and collected post-excavation samples from decision units PE23 PE24 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 submitted revised draft STORM Plan to EPA.
● START ecologist and lead engineer arrived on site for revegetation-related site walk and discussion.
● USCG repositioned air station AS02 further into AAW to allow for grading activities, per request from ERRS.
● START contacted Brinno regarding possible time-lapse camera replacement and troubleshooting.
● ERRS awarded supply contract for STORM materials, including silt fence, wattles, PVC liner.
● ERRS placed storm drain filters on Bree Road.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes and borrow source material. ERRS also continued to excavate toward the upstream side of the landfill during construction of the temporary stormwater conveyance.

Wednesday, September 14

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 7.
● ERRS continued to excavate in the landfill and finished loading waste into Containment Cell 4, then began loading waste into Containment Cell 5.
● ERRS continued to load-out tires for transportation to a local facility for recycling.
● START shipped post-excavation samples from decision unit PE23 and PE24 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 data manager arrived on site for viper setup and testing.
● ERRS, START and Coast Guard performed cylinder inventory.
● ERRS flared off propane from propane cylinders using a weed burner.
● START collected GPS coordinates of the extent of excavations in order to update site figure(s).
● Street sweeper arrived to clean Bree Road.
● START received data for PCBs and metals analysis from post-excavation decision unit PE22. Results were below site action levels for contaminants of concern.
● ERRS continued to regrade and backfill the NW corner of the excavation area (including the Airport Auto Wrecking property) using the existing clean slopes and borrow source material. ERRS also continued to excavate toward the upstream side of the landfill during construction of the temporary stormwater conveyance.

Thursday, September 15

● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 7 and 8.
● ERRS continued to excavate in the landfill and load waste into Containment Cell 5, then began loading waste into Containment Cell 6.
● ERRS continued to load-out steel for transportation to a local facility for recycling.
● START collected three composite samples from Containment Cell 5. These samples 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.
● START data manager conducted successful proof of concept with customized MultiRae Pro/Linc/Cradlepoint deployment.
● ERRS continued to shape the northern slope of the landfill adjacent to AAW property and excavate the temporary stormwater conveyance.

Friday, September 16
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cells 8 and 1.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 6, then began loading waste into Containment Cell 7.
● START collected three composite samples from Containment Cell 6, which were delivered to the off-site laboratory by private courier.
● ERRS and START combined two containers of radioactive material and associated PPE into one overpack container, which is scheduled for transportation off site on Tuesday, September 20.
● 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. Most areas tested passed compaction at or above the 90% density specified. Two areas tested failed compaction at 86% density and 7% moisture, so the areas around and surrounding those tests were re-rolled and tested again. All remaining locations passed at 90% to 95% compaction and 6-9% moisture. Moisture content was above ideal content of 5 to 7%, but some of the borrow source material was more sandy than what was tested to determine moisture content. According to the geotechnical engineer, the sandier material requires more moisture to achieve specified density.
● The geotechnical contractor delivered the Geotechnical Engineering Report.
● START data manager worked to update DataRam Lincs for compatibility with DustTrak Lincs; additional troubleshooting remains.
● START performed troubleshooting of Brinno time-lapse camera with support from Brinno help desk; the SD card was corrupted. A different SD card was reformatted, and the camera became operational.
● Street sweeper came to clean Bree Road.
● ERRS stated that AAW is ready for fence reinstallation.
● ERRS continued to shape the northern slope of the landfill adjacent to AAW property and excavate the temporary stormwater conveyance.

Saturday, September 17
● 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 Cells 7 and 8.
● 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 shipped air samples for lead and arsenic analysis collected September 12-16.
● START conducted weekly SWPPP inspection.
● START and ERRS met to discuss upcoming cost projection and progress reporting tasks.
● START project manager talked with ERT-Las Vegas cylinder expert Duane Newall to mitigate cylinders in early October.
● START deployed Brinno time-lapse camera to base of ravine.
● START shipped air samples for lead and arsenic analysis collected September 9-16.
● ERRS continued to shape the northern slope of the landfill adjacent to AAW property and excavate the temporary stormwater conveyance.

Monday, September 19
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 2.
● ERRS continued to excavate in the landfill and load waste into Containment Cell 8.
● START collected three composite samples from Containment Cell 7. These samples were delivered to the off-site laboratory by private courier.
● START collected two grab samples of compost material from local vendors for analysis of TAL metals and TPH. These samples 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.
● START conducted weekly SWPPP inspection; it rained 0.20 inches during the previous 24-hour interval. No discharge was observed off site.
● ERRS inventoried the escape air packs on site, and filled one cylinder that was less than full.
● START reviewed potential in-house resources for uncorrupting the video files from the time lapse camera deployed at Air Station 3 from mid-August through early September.
● START submitted weekly equipment summary to the OSC.
● USCG deployed DustTrak for a trial run with two internal batteries (instead of just one). The instrument lasted the full day of deployment.
● ERRS and START met to discuss requirements of Cost Projection, due to EPA on September 30, for all anticipated costs through the end of the removal action.
● ERRS continued to excavate and grade the landfill during construction of the temporary stormwater conveyance.

Tuesday, September 20
● 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 8, then began work at Containment Cell 1.
● ERRS continued to load-out steel for transportation to a local facility for recycling.

● Disposal contractor for the one drum of radioactive material arrived on site, to transport material to disposal facility in Grandview, Idaho.
● START collected three composite samples from Containment Cell 8. These samples were delivered to the off-site laboratory by private courier.
● START received data for PCBs and metals analysis from post-excavation decision unit PE23 and PE24; results were below site action levels for contaminants of concern.
● 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 subcontractor arrived to perform compaction testing of areas being backfilled. The areas that passed compaction, at or above the 90% density specified, were at the bottom of the north slope at 97% density, and 8% moisture. However, the middle and top of the slope were less than 90%. The geotechnical engineer suggested changing the orientation of the vibratory compactor with the roller on the downhill side of the machine. To test this theory, the roller took three passes using the new orientation which resulted in an increase of 3% density.
● ERRS received STORM materials, including straw wattles, wooden stakes, and silt fencing.
● ERRS performed a site walk with the fencing contractor along the boundary of AAW and the landfill.
● ERRS continued to excavate and grade the landfill during construction of the temporary stormwater conveyance.

Wednesday, September 21
● 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 finished loading waste into Containment Cell 1, then began loading waste into Containment Cell 2.
● START shipped air samples for lead and arsenic analysis collected September 17-20.
● 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.
● Street sweeper arrived to clean Bree Road.
● ERRS continued to excavate and grade the landfill during construction of the temporary stormwater conveyance. An excavator operator accessed the upstream ravine to manage downed trees and reduce the potential of floating trees creating a logjam in the temporary stormwater conveyance during STORM operations. Another excavator operator cut through the berm on the downstream side of the landfill and began to gain access to the face of the ravine leading to the culvert outfall.

Thursday, September 22
● 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 load waste into Containment Cell 1.
● START collected three composite samples from Containment Cell 1. These samples 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.
● The geotechnical subcontractor arrived to perform compaction testing of areas being backfilled and was accompanied by a member of USCG.
● START received data for air samples submitted for lead analysis that were collected September 12-16. Results were below site action levels.
● ERRS continued to excavate and grade the landfill during construction of the temporary stormwater conveyance. ERRS worked to clear out the channel area on the upstream ravine and remove fallen trees from the downstream ravine. In limited situations, native material with concentrations below site action levels was graded over existing landfill material near the upstream grade in the vicinity of PE23 and PE24 in order to achieve recommended slopes for STORM. This material will be over-excavated during 2017 field operations to achieve the final slopes once the base of the Gorst Creek channel is identified.

Friday, September 23
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 4, then 5.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 6, then began loading waste into Containment Cell 2.
● 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.
● A generator from Air Station 3 was stolen sometime during the evening. A report was filed with local law enforcement. Heavy duty reinforced chains and locks were purchased for securing the remaining generators.
● EPA OSC Boykin and START QA Manager Woodke arrived on site to perform a QA audit of SSSPs, data management, logbooks, field forms, calibrations, etc.
● START collected GPS coordinates of site features related to the grading for temporary conveyance.
● START continued work on the Planting Memorandum and volume calculations required for the Cost Projection.
● START received data for air samples submitted for asbestos analysis on September 17-20. Results were below site action levels.
● ERRS received 1000 linear feet of liner material for the temporary conveyance.
● ERRS submitted draft demobilization plan including site activities that remain for the current field season.
● ERRS continued to grade the western section of the landfill leading to the downstream ravine, and excavate material along the southern face near the upstream ravine.

Saturday, September 24
● ERRS loaded trucks and trailers with non-hazardous waste for off-site transportation and disposal from Containment Cell 5, then began Containment Cell 6.
● ERRS continued to excavate in the landfill and loaded waste into Containment Cell 2.
● 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.
● EPA continued with the QA audit.
● START deployed time-lapse camera at the base of the ravine with accelerated (2 second) frequency to capture afternoon activities; the camera was recovered at the end of the day.
● START continued work on the Planting Memorandum and volume calculations required for the Cost Projection.
● ERRS continued to shape and compact the northern slope of the landfill near the bypass generators. ERRS also placed liner material at the base of the downstream ravine which was secured with large concrete blocks.

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. Sept 12	27				Cell 4 - 27 loads
Tue, Sept 13	29				Cell 4 - 29 loads
Wed, Sept 14	23				Cell 4 - 2 loads, cell 5 - 21 loads
Thu, Sept 15	81				Cell 5 - 44 loads, cell 6 - 37 loads
Fri, Sept 16	74				Cell 6 - 51 loads, cell 7 - 23 loads
Sat, Sept 17	72				Cell 7 - 69 loads, cell 8 - 3 loads
Mon, Sept 19	60				Cell 8 - 60 loads
Tue, Sept 20	62				Cell 8 - 40 loads, cell 1 - 22 loads
Wed, Sept 21	44				Cell 1 - 43 loads, cell 2 - 1 load
Thurs, Sept 22	45				Cell 1 - 28 loads, cell 2 - 17 loads
Fri, Sept 23	42				Cell 2 - 42 loads
Sat, Sept 24	8			1	Cell 2 - 8 loads
Subtotal for Reporting Period	**567**			**1**	

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, Sept 12	1,709.40	53						
Tue, Sept 13	2,288.94	69				21.97		
Wed, Sept 14	1,927.64	58					32.37	
Thu, Sept 15	2,035.61	61				19.45		
Fri, Sept 16	1,670.44	50						
Sat, Sept 17	1,814.51	54						
Mon, Sept 19	1,691.86	52						

Tue, Sept 20	1,638.33	51				20.90		0.093 T rad
Wed, Sept 21	1,633.46	51						
Thu, Sept 22	1,463.02	45						1.3 tons Batteries
Fri, Sept 23	1,329.08	44						
Sat, Sept 24	1,405.27	44						
Subtotal for Reporting Period	**20,607.56**	**633**				**62.32**	**32.37**	**1.393 batteries/rad**
Subtotal for All Previous Reporting Periods	**126,104.78**	**3,898**	**1,770.62**	**61**	**4,374.21**	**552.65**	**276.18**	
Total Material Hauled Off Site	**146,712.34**	**4,531**	**1,770.62**	**61**	**4,374.21**	**614.97**	**308.55**	**1.393 batteries/rad**

Total Off Site Disposal/Recycling all material to Date
153,782.08 Tons

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

2.4.1 Narrative

EPA received initial payment under AOC of $24.8 million.

• The AOC has unique reporting requirements due to DOJ and Judgement Fund requirements.

• EPA must provide DOJ periodic progress reports, cost accounting and revised cost estimates.

Budget/Financial tracking and burn rate will be tracked separately outside of POLREP system.

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.