UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

OFFICE OF ENVIRONMENTAL CLEANUP
EMERGENCY RESPONSE UNIT

Site Specific Sampling Plan

Project Name: Gorst Creek Removal Action Site ID: 10GL

Removal Action Phase: Pre-Removal Action Baseline Sampling

Author: Mark Woodke Company: E & E Date Completed: May 16, 2016

This Site Specific Sampling Plan (SSSP) is prepared and used in conjunction with the Quality Assurance Plan (QAP) for the Emergency Response Unit for collecting samples during this Removal Program project. The information contained herein is based on the information available at the time of preparation. As better information becomes available, this SSSP will be adjusted.
When inadequate time is available for preparing the SSSP in advance of the sampling event, a Field Sampling Form may be prepared on-site immediately prior to sampling. This full length version of the SSSP is written after the sampling event and the completed Field Sampling Form attached to it.

1. Approvals

Name, Title	Telephone, Email, Address	Signature
Jeff Rodin, On-Scene Coordinator	206 553-6709, rodin.jeffry@epa.gov USEPA , M/S: ECL-116, 1200 Sixth Ave. Suite 900, Seattle, WA 98101	JEFFRY RODIN Digitally signed by JEFFRY RODIN DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff, cn=JEFFRY RODIN, dnQualifier=0000010814 Date: 2016.06.09 14:09:44 -07'00'
Kathy Parker, ERU Quality Assurance Coordinator	206-553-0062, parker.kathy@epa.gov USEPA , M/S: ECL-116, 1200 Sixth Ave. Suite 900, Seattle, WA 98101	Kathy Parker Digitally signed by Kathy Parker DN: cn=Kathy Parker, o=EPA, ou=OSC, email=parker.kathy@epa.gov, c=US Date: 2016.06.09 14:02:01 -07'00'

I. Project Management and Organization

2. Personnel and Roles involved in the project:

Name	Telephone, Email, Company, Address	Project Role	Data Recipient
Jeff Rodin	206 553-6709, rodin.jeffry@epa.gov, USEPA , M/S: ECL-116, 1200 Sixth Ave. Suite 900, Seattle, WA 98101	On Scene Coordinator	Yes
Jake Moersen	206 624-9537, jmoersen@ene.com, E & E 720 Third Avenue, Suite 1700 Seattle, Washington 98104	Superfund Technical Assessment and Response Team (START) Field Manager	Yes
Kathy Parker	206 553-0062, parker.kathy@epa.gov USEPA , M/S: ECL-116, 1200 Sixth Ave. Suite 900, Seattle, WA 98101	ERU Quality Assurance Coordinator	No
Mark Woodke	206 624-9537, mwoodke@ene.com, E & E 720 Third Ave, Suite 1700 Seattle, WA 98104	START Quality Assurance Reviewer	Yes

Kelly Buettner	717-656-2300, KellyBuettner@eurofinsus.com Eurofins Lancaster Laboratories Environmental, 2425 New Holland Pike, Lancaster, PA 17601	General Laboratory Contact	No
Robert DeMalo	800-220-3675 x 2502; rdemalo@emsl.com EMSL Analytical, Inc., 200 Route 130, North Cinnaminson, NJ 08077	Asbestos Laboratory Contact	No

3. Physical Description and Site Contact Information:

Site Name	Bremerton Auto Wrecking Landfill/Gorst Creek Removal	
Site Location	4275 State Highway 3 SW, Port Orchard, Washington (See Figure 1).	
Property Size	Approximately 10 acres (See Figure 2).	
Site Contact		Phone Number:
Nearest Residents	Within 0.25 miles	Direction: North and east
Primary Land Uses Surrounding the Site	Commercial, recreational, residential	

4. The proposed schedule of project work follows:

Activity	Estimated Start Date	Estimated Completion Date	Comments
SSSP Review/Approval	3/20/2016	4/22/2016	
Mobilize to / Demobilize from Site	4/12/2016	9/30/2016	Dates are approximate. Completion date is the estimated last date of the Removal Action.
Sample Collection	4/20/2016	9/20/2016	Initial background samples to be collected on April 20. Completion date is the estimated last date of the sample collection for the Removal Action.
Laboratory Sample Receipt	4/25/2016	9/21/2016	Completion date is the estimated last date for sample receipt of the Removal Action.
Laboratory Analysis	4/26/2016	9/28/2016	Various turnaround times depending on needs. Completion date is the estimated last date of laboratory analysis for the Removal Action.
Data Validation	4/30/2016	9/29/2016	Completion date is the estimated last date of data validation for the Removal Action.

5. Historical and Background Information

The Bremerton Auto Wrecking Landfill – Gorst Creek Removal Action property encompasses a triangular parcel centered over approximately 700 feet of the Gorst Creek Ravine (Figure 2). An auto wrecking yard (Airport Auto Wrecking, Too) borders the property to the northeast, and the Washington State Department of Transportation (WSDOT) owns the property adjacent to the landfill to the northwest (downstream), including State Highway 3 SW and an easement corridor on either side of the highway. Gorst Creek flows northwest under the property through an approximate 700 foot-long 24-inch

corrugated steel culvert, then under State Highway 3 through a box culvert. The Gorst Creek Landfill was an active facility from the late 1950s until approximately 1987. In 1997, Gorst Creek backed up behind the landfill, flooded, and a portion of the northwest slope of the landfill failed, washing into Gorst Creek down slope of the landfill. Wastes were found approximately one-half mile downstream in Gorst Creek. The site is estimated to contain approximately 150,000 cubic yards of waste. Potential contaminants of concern associated with landfill operations include chlorinated pesticides (pesticides), chlorinated herbicides (herbicides), polychlorinated biphenyls (PCBs), target analyte list (TAL) metals, semivolatile organic compounds (SVOCs), asbestos, and volatile organic compounds (VOCs). In 2011, EPA performed an Engineering Evaluation/Cost Analysis to determine potential alternative actions to be taken at the site. Based on potential threats of site contaminants to human health and the environment, EPA decided to perform a time-critical removal action at the site which includes removal of the 150,000 cubic yards of waste.

This SSSP is the first of several that will be used to support the removal action. This specific SSSP addresses pre-removal action sampling at the laydown and stockpile staging area (i.e., background sampling). Post-removal action sampling will primarily be discussed in a separate SSSP.

References:

Ecology and Environment, April 2012, Final Draft Engineering Evaluation/Cost Analysis, Bremerton Auto Wrecking Landfill - Gorst Creek Site, prepared for the United States Environmental Protection Agency, Seattle, Washington, Contract Number EP-S7-06-02, Technical Direction Document Number 11-11-0005.

Hart Crowser, Inc., October 2000, Site Hazard Assessment Gorst Landfill, prepared for the Department of the Navy, Engineering Field Activity Northwest, Naval Facilities Engineering Command, Contract Number N44255-98-D-4409.

Kitsap County Health Department, Various Dates, Site files for the Gorst Creek – Bremerton Auto Wrecking Landfill.

United States Environmental Protection Agency, January 2003, Geographic Information Query System for Gorst Creek – Bremerton Auto Wrecking Landfill.

6. Conceptual Site Model

Contaminants: VOCs, SVOCs, pesticides, herbicides, PCBs, TAL metals, asbestos

Transport Mechanisms: Direct contact with soils and/or sediments, migration to groundwater or surface water, vapor or particles moving on air currents

Receptors: People on site, people using groundwater or surface water sources, people downwind of the site, and ecological receptors in the creek downstream of the site

7. Decision Statement

The decision(s) to be made from this investigation is/are to:

Background Sampling – Soil in the stockpile staging area, at the command post, and within the haul roads leading to this area from the landfill and from Highway 3 SW – Determine if the soil stockpiles have an impact on surface soils by collecting samples prior to and after excavation activities to establish baseline and post-excavation concentrations.

8. Action Level

Screening levels for surface soils located in the stockpile staging area, at the command post, and along, within the haul roads leading to this area from the landfill and from the command post area will be determined based on pre- and post-removal action concentrations. Post-removal concentrations that exceed the pre-removal concentrations may also be removed and disposed of off-site at the OSC's discretion.

II. Data Acquisition and Measurement Objectives

9. Site Diagram and Sampling Areas

The site diagram is included in Figure 2.

Background samples will be collected from the stockpile area based on a division of the area into four approximately equal quadrants. The stockpile area is approximately 5 acres, so a single sample will represent approximately 1.25 acres. Background samples will be collected from the haul roads leading to the stockpile area from both the landfill and the command post area. A background sample will also be collected from the command post area. Nine background soil samples will be collected.

10. The Decision Rules

If surface soil results from the stockpile area after the removal action exceed the pre-removal background results, the soil may be disposed of at a non-hazardous waste/municipal waste landfill (to be determined).

11. Information Needed for the Decision Rule

The following inputs to the decision are necessary to interpret the analytical results:

Contaminant concentrations
Action/screening levels

12. Sampling and Analysis

For each SA, describe:

Background Samples

A total of 9 random composite (grab for VOCs) surface soil samples will be collected from the stockpile area, the command post area, and the haul roads leading to the stockpile area before excavation and waste management to establish a baseline level of contamination. A total of four samples will be taken from the stockpile area based on a division of the area into four quadrants. Four samples will be collected from the haul roads leading into the stockpile area including one from the haul road leading from the landfill to the stockpile area and two from the command post area to the stockpile area. One sample will be collected from the command post area. Each composite sample will be composed of a minimum of five subsamples, which will be collected from 0 to 6 inches below ground surface using dedicated stainless steel spoons. Grab samples for VOCs will be collected at the central subsample location for each composite.

These samples will be submitted for the following chemical parameters:

VOCs (EPA Method 8260)
SVOCs (EPA Method 8270)
Herbicides (EPA Method 8151)
Pesticides (EPA Method 8081)
Organophosphorus Pesticides (EPA Method 8141)
PCBs (EPA Method 8082)
TAL Metals with Mercury EPA 6020/7470
Diesel Range Organics NWTPH-Dx
Gasoline Range Organics NWTPH-Gx
Asbestos in Soil by California Air Resource Board (CARB) Method 435 (0.25% reporting limit)

The off-site laboratory for general chemical analyses is Eurofins Lancaster Laboratory in Lancaster, Pennsylvania.

The off-site laboratory for asbestos analyses is EMLab P&K San Bruno in San Bruno, California.

13. Applicability of Data (place an X in front of the data categories needed, explain with comments)

_X_ ***A) Definitive data*** *is analytical data of sufficient quality for final decision-making. To produce definitive data on-site or off-site, the field or lab analysis will have passed full Quality Control (QC) requirements (continuing calibration checks, Method Detection Limit (MDL) study, field duplicate samples, field blank, matrix spikes, lab duplicate samples, and other method-*

specific QC such as surrogates) AND the analyst will have passed a Precision and Recovery (PAR) study AND the instrument will have a valid Performance Evaluation sample on file. This category of data is suitable for: ***1) enforcement purposes, 2) determination of extent of contamination, 3) disposal, 4) RP verification or 5) cleanup confirmation.***
Comments: All chemical analyses at the off-site laboratory will produce definitive data.

___***B) Screening data with definitive confirmation*** *is analytical data that may be used* ***to support preliminary or intermediate decision-making*** *until confirmed by definitive data. However, even after confirmation, this data is often not as precise as definitive data. To produce this category of data, the analyst will have passed a PAR study to determine analytical error AND 10% of the samples are split and analyzed by a method that produced definitive data with a minimum of three samples above the action level and three samples below it.*
Comments:

__***C) Screening data*** *is analytical data which has not been confirmed by definitive data. The QC requirements are limited to an MDL study and continuing calibration checks. This data can be used for making decisions:* ***1) in emergencies, 2) for health and safety screening, 3) to supplement other analytical data, 4) to determine where to collect samples, 5) for waste profiling, and 6) for preliminary identification of pollutants****. This data is not of sufficient quality for final decision-making.*
Comments:

14. Special Sampling or Analysis Directions

Combination of sample volumes for TPH-Dx and SVOCs are acceptable to a single sample container.
Combination of sample volumes for Pesticides, Herbicides, and PCBs are acceptable to a single sample container.

15. Method Requirements

[Describe the restrictions to be considered in choosing an analytical method due to the need to meet specific regulations, policies, ARARs, and other analytical needs. Examples: 1) Methods must meet USEPA Drinking Water Program requirements. 2) Methods must achieve lower quantitation limits of less than 1/10 the action levels.3) Methods must be performed exactly as written without modification by the analytical laboratory.]

Methods must be performed as written without modification by the laboratory.

16. Sample Collection Information

The applicable sample collection Standard Operating Procedures (SOPs) or methods will be followed and include:
Field Activity Logbook SOP
Sample Packaging and Shipping SOP
Sampling Equipment Decontamination SOP
Instrument SOPs: Photoionization detector Quick Start Guide
DataRAM 4 Quick Start Guide
Other SOPs:
Site entry
Soil sampling
VOC – Soil and sediment sampling

17. Optimization of Sampling Plan (Maximizing Data Quality While Minimizing Time and Cost)

The format for sample number identification is summarized in Table 1. Sample collection and analysis information is summarized in Table 2.

Table 1
SAMPLE CODING

Project Name: Bremerton Auto Wrecking Landfill/Gorst Creek Removal **Site ID:** 10GL

SAMPLE NUMBER [(1)]		
Digits	**Description**	**Code (Example)**
1,2,3,4	Year and Month Code	1604 (YYMM)
5,6,7,8	Consecutive Sample Number (grouped by SA as appropriate)	0001 (First sample of SA)

SAMPLE NAME / LOCATION ID [(2)] ***(Optional)***		
1,2	Sampling Area	CP – Command Post HR – Road SA – Stockpile Area TB – Trip Blank
3,4	Consecutive Sample Number	01 – First sample of Sampling Area
5,6	Matrix Code	SS – Surface Soil
7,8	Depth (Optional)	01 (feet below ground surface)

Notes:
(1) The Sample Number is a unique, 8-digit number assigned to each sample.
(2) The Sample Name or Location ID is an optional identifier that can be used to further describe each sample or sample location.

Table 2. Sampling and Analysis

Data Quality	Sampling Area	Matrix	Sampling Pattern	Sample Type	Data Quality	Number of Field Samples	Analyte or Parameter	EPA Method Number	Action Level	Method Quant. Limit	#/type of Sample Containers per Sample	Preservative (Ice to ≤6oC)	Hold Time (days unless otherwise noted) (to extraction/to analysis)	Field QC
Lab Analysis	Background/ Stockpile Area/Haul Road/ Command Post	Soil	Random	Composite	Definitive	9	VOCs SVOCs Asbestos Herbicides Pesticides PCBs TAL Metals	8260 8270 CARB 435 8151 8081 8082 6000/7000 Series	Post-excavation results greater than pre-excavation results	See Attachments	3xEnCore 1x8-oz glass 1x1 Quart ziplocking bag 1x8-oz glass 1x8-oz glass 1x8-oz glass 1x8-oz glass	Frozen None None None None None None	14 14/40 None 14/40 14/40 14/40 6 months (28 days mercury)	1 Duplicate/ 20 samples
Lab Analysis	Trip Blanks	Water	QC Sample	Grab	Definitive	1	VOCs	8260	None	See Attachments	3x40 mL VOA vials	HCl pH ≤ 2	14	None

Note: For matrix spike and/or duplicate samples, no extra volume is required for air (unless co-located samples are collected), oil, product, or soil samples except soil VOC or NWTPH-Gx samples (triple volume). Triple volume is also required for organic water samples (double volume for inorganic).

Table 3. Common Sample Handling Information

Analysis Type	Sub Analysis	Matrix	Analytical Method	Container Type	Minimum Volume	Preservative	Temperature/ Storage	Hold Time	Source
Metals	Metals Not including Mercury or Hexachrome. Includes TAL, PP, RCRA lists)	Solid	EPA 6000 / 7000 Series	Glass Jar	200 g	n/a	None	6 months	SW-846 ch. 3
		Aqueous	EPA 6000 / 7000 Series	PTFE or HDPE	600 mL	HNO_3 to pH < 2	Not listed	6 months	SW-846 ch. 3
	Mercury	Solid	EPA 7471B	Glass Jar	200 g	n/a	$\leq 6^{o}$ C	28 days	SW-846 ch. 3
		Aqueous	EPA 7470A	PTFE or HDPE	400 mL	HNO_3 to pH < 2	Not listed	28 days	SW-846 ch. 3
	Hexavalent Chromium, (Hexachrome, Cr+6)	Solid	Lab-specific soil extraction modification, EPA 7196A	Glass Jar	100 g	n/a	$\leq 6^{o}$ C	28 days to extraction	SW-846 ch. 3
		Aqueous	EPA 218.6 (Drinking Water)	PTFE or HDPE	400 mL	n/a	$\leq 6^{o}$ C	24 hours	SW-846 ch. 3
	XRF	Solid (in situ; on the ground surface)	6200	none	n/a	none	none	Analyze Immediately	n/a
		Solid (ex situ)	6200	plastic bag	200 g	none	none	6 months	n/a
VOCs	VOCs / BTEX	Solid	EPA 5035 / 8260B	*	*	*	*	2 days to lab / 14 days	SW-846 ch. 4
		Aqueous	EPA 8260B	Amber Vial with Septa Lid	2 x 40 mL	HCl to pH< 2	$\leq 6^{o}$ C (headspace free)	14 days	SW-846 ch. 4
SVOCs	SVOCs / PAHs	Solid	EPA 8270D	Glass Jar	8 ounces	n/a	$\leq 6^{o}$ C	14 days	SW-846 ch. 4
		Aqueous	EPA 8270D	Amber Glass	2 x 1 L	n/a	$\leq 6^{o}$ C	7 days	SW-846 ch. 4
PCBs and Dioxins/Furans	PCBs	Solid	EPA 8082	Glass Jar	8 ounces	n/a	$\leq 6^{o}$ C	none	SW-846 ch. 4
		Aqueous	EPA 8082	Amber Glass	2 x 1 L	n/a	$\leq 6^{o}$ C	none	SW-846 ch. 4
	Dioxins/Furans	Solid	EPA 8280 or 8290	Glass Jar	8 ounces	n/a	$\leq 6^{o}$ C	none	SW-846 ch. 4
		Aqueous	EPA 8280 or 8290	Amber Glass	2 x 1 L	n/a	$\leq 6^{o}$ C	none	SW-846 ch. 4
Pesticides and Herbicides	Chlorinated Pesticides	Solid	EPA 8081	Glass Jar	8 ounces	n/a	$\leq 6^{o}$ C	14 days	SW-846 ch. 4
		Aqueous	EPA 8081	Amber Glass	2 x 1 L	n/a	$\leq 6^{o}$ C	7 days	SW-846 ch. 4
	Chlorinated Herbicides	Solid	EPA 8151	Glass Jar	8 ounces	n/a	$\leq 6^{o}$ C	14 days	SW-846 ch. 4
		Aqueous	EPA 8151	Amber Glass	2 x 1 L	n/a	$\leq 6^{o}$ C	7 days	SW-846 ch. 4
NWTPH	Gasoline-Range Organics	Solid	TPHs/NWTPH-Gx	Amber Glass Jar with Septa Lid	4 ounces	n/a	$\leq 6^{o}$ C (headspace free)	14 days	Method
		Aqueous	TPHs/NWTPH-Gx	Amber Vial with Septa Lid	2 x 40 mL	pH < 2 with HCl	$\leq 6^{o}$ C (headspace free)	7 days unpreserved 14 days preserved	Method
	Diesel-Range Organics	Solid	3510, 3540/3550, 8000	Glass Jar	8 ounces	n/a	$\leq 6^{o}$ C	14 days	Method
		Aqueous	3510, 3540/3550,	Glass Amber	2 x 1 L	pH < 2 with HCl	$\leq 6^{o}$ C	7 days unpreserved 14 days preserved	Method

Analysis Type	Sub Analysis	Matrix	Analytical Method	Container Type	Minimum Volume	Preservative	Temperature/ Storage	Hold Time	Source
			8000						
Miscellaneous	pH	Solid	EPA 9045	Glass Jar	8 ounces	n/a	n/a	Analyze Immediately	SW-846 ch. 3
		Aqueous	EPA 9040	PTFE	25 mL	n/a	n/a	Analyze Immediately	SW-846 ch. 3
	Total Organic Carbon (TOC)	Solid	SW-846 9060	Glass Jar	100 mL	n/a	$\leq 6^{o}$ C	28 days	SW-846
		Aqueous	EPA 415.1	PTFE or HDPE	200 mL	store in dark HCL or H_2SO_4 to pH <2	$\leq 6^{o}$ C	7 days unpreserved 28 days preserved	Method
	Cyanide	Solid	SW-846 9013	Glass Jar	5 g	n/a	$\leq 6^{o}$ C	14 days	SW-846 ch. 3
		Aqueous	SW-846 9010C	PTFE or HDPE	500 mL	NaOH to pH > 12	$\leq 6^{o}$ C	14 days	SW-846 ch. 3
	Conductivity	Aqueous	EPA 120.1	PTFE or HDPE	100 mL	n/a	n/a	Analyze Immediately	Method
	Hardness	Aqueous	EPA 130.1	PTFE or HDPE	1 x 1 L	HNO3 to pH<2	$\leq 6^{o}$ C	28 days	Method
	Total Suspended Solids	Aqueous	EPA 160.2	PTFE or HDPE	100 mL	n/a	$\leq 6^{o}$ C	7 days	Method
	Total Dissolved Solids	Aqueous	EPA 160.1	PTFE or HDPE	100 mL	n/a	$\leq 6^{o}$ C	7 days	Method
	Nitrate/nitrite	Aqueous	EPA 353.2	PTFE or HDPE	1 x 250 mL	H_2SO_4 to pH <2	$\leq 6^{o}$ C	28 days	Method
	Nitrate	Aqueous	SW-846 9210A	PTFE or HDPE	1,000 mL	n/a	$\leq 6^{o}$ C	28 days	SW-846 ch. 3
	Nitrite	Aqueous	SW-846 9216	PTFE or HDPE	25 mL	n/a	$\leq 6^{o}$ C	48 hours	SW-846 ch. 3, Method
	Fluoride	Aqueous	SW-846 9214	PTFE or HDPE	300 mL	n/a	$\leq 6^{o}$ C	28 days	SW-846 ch. 3
	Chloride	Aqueous	SW-846 9250	PTFE or HDPE	50 mL	n/a	$\leq 6^{o}$ C	28 days	SW-846 ch. 3
	Sulfate	Aqueous	SW-846 9035	PTFE or HDPE	50 mL	n/a	$\leq 6^{o}$ C	28 days	SW-846 ch. 3
	Sulfide	Solid	SW-846 9215	Glass Jar	1 x 4 ounces	Fill sample surface with 2N zinc acetate until moistened.	$\leq 6^{o}$ C (headspace free)	7 days	SW-846 ch. 3
		Aqueous	SW-846 9031	PTFE or HDPE	100 mL	4 drops 2N zinc acetate/100 mL sample; NaOH to pH>9.	$\leq 6^{o}$ C (headspace free)	7 days	SW-846 ch. 3

Key:

* = See individual methods. We typically collect 3xEnCore-type samplers and 1x40 mL VOA vial per sample, keep at $\leq 6^{o}$C with no chemical preservative, and they must be at the lab within 48 hours of collection.

C	= Celsius	HNO_3	= nitric acid	SVOCs	= semivolatile organic compounds
Cr	= chromium	L	= liter	SW-846	= EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods
EPA	= Environmental Protection Agency	mL	= milliliter	TAL	= Target Analyte List
g	=grams	n/a	= not applicable	TPH	= total petroleum hydrocarbons
H2SO4	= sulfuric acid	NaOH	= sodium hydroxide	VOA	= Volatile Organic Analysis
HCL	= hydrochloric acid	PCBs	= polychlorinated biphenyls	VOCs	= Volatile Organic Compounds
HDPE	= high-density polyethylene	PTFE	= polytetrafluoroethylene		
Hg	= mercury	RCRA	= Resource Conservation and Recovery Act		

III. Assessment and Response

A Sample Plan Alteration Form (SPAF) will be used to describe project discrepancies (if any) that occur between planned project activities listed in the final SSSP and actual project work. The completed SPAF will be approved by the OSC and QAC and appended to the original SSSP.

A Field Sampling Form (FSF) may be used to capture the sampling and analysis scheme for emergency responses in the field and then the FSF pages can be inserted into the appropriate areas of the final SSSP.

Corrective actions will be assessed by the sampling team and others involved in the sampling and a corrective action report describing the problem, solution, and recommendations will be forwarded to the OSC and the ERU QAC.

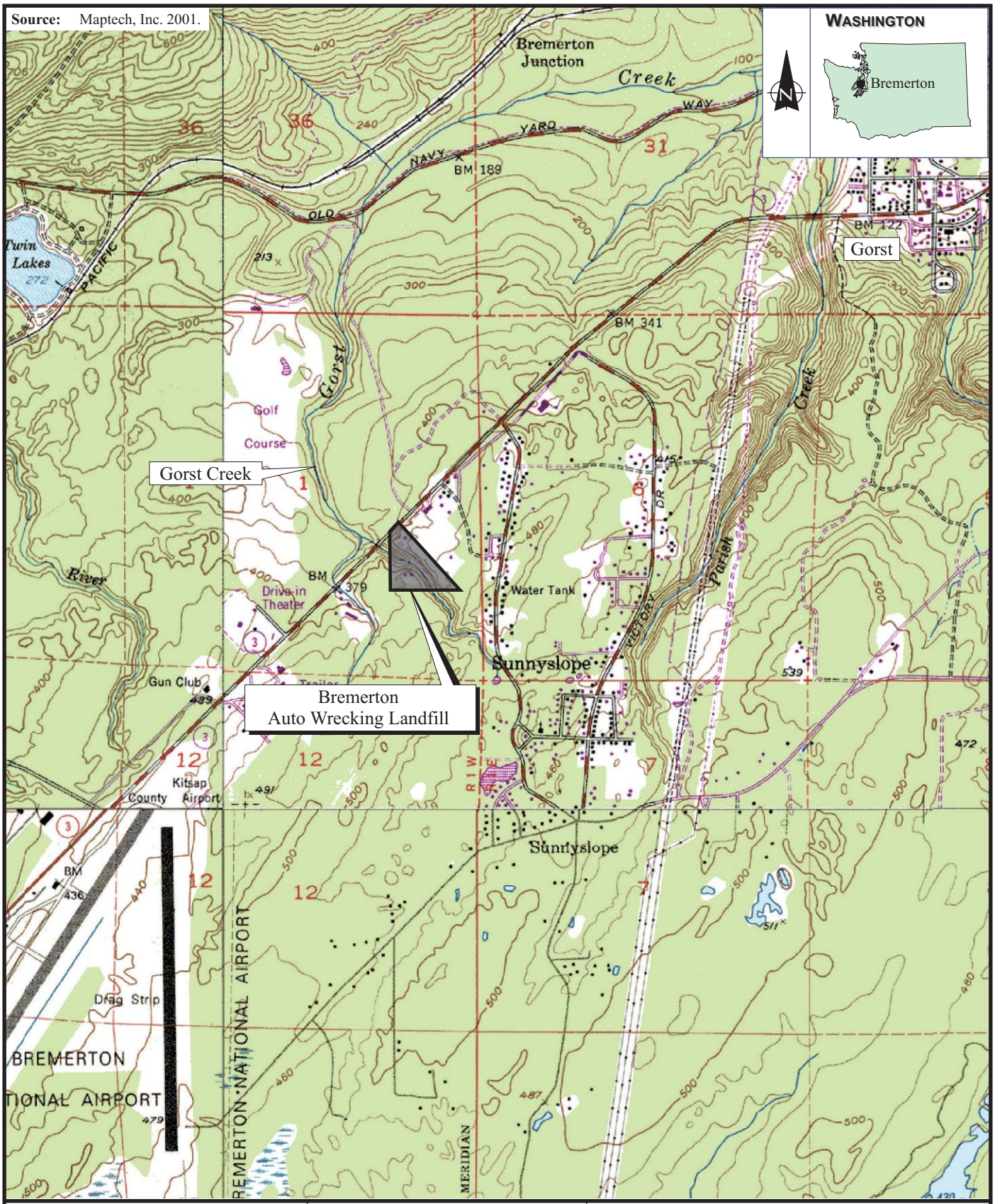
IV. Data Validation and Usability

The sample collection data will be entered into Scribe and Scribe will be used to print lab Chains of Custody. Results of field and lab analyses will be entered into Scribe as they are received and uploaded to Scibe.net when the sampling and analysis has been completed.

18. Data Validation or Verification will be performed by:

ERU's general recommendation on validation is that a minimum of CLP-equivalent stage IIA verification and validation be performed for every SSSP involving laboratory analyses. However, stage IIB is preferred if the lab can provide it. Dioxins should be validated at CLP-equivalent stage 4.

	Data Verification and Validation Stages						
Performed by:	I	IIA	IIB	III	IV	Verification	Other:
E and E QA Reviewer			100%		10%		
EPA Region 10 QA Office							
MEL staff							
Other:							



ecology and environment, inc.
Global Environmental Specialists
Seattle, Washington

GORST CREEK-BREMERTON
AUTO WRECKING LANDFILL
Port Orchard, Washington

Figure 1

SITE LOCATION MAP

0 1000 2000
Approximate Scale in Feet

Date:	Drawn by:	
4-6-16	AES	10:START-IV\08090006\fig

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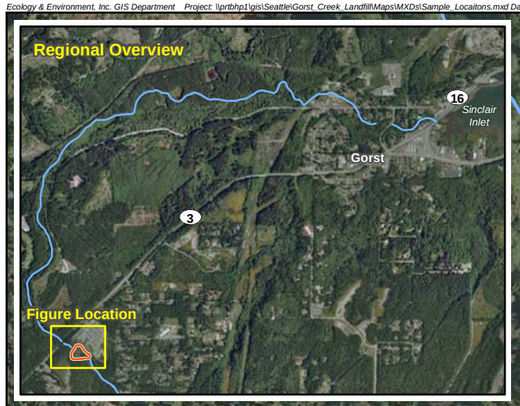

Gorst Creek - Bremerton Auto Wrecking Landfill

Outfall location

24-inch corrugated metal pipe under the landfill

Gorst Creek - Bremerton Auto Wrecking landfill boundary

Bremerton Auto Wrecking Landfill/Gorst Creek

Port Orchard, Washington

N
W E
S

Map Projection: NAD 1983 UTM Zone 10N Meter
Map Scale: 1: 2,000

0 25 50 100 150 200 250

Feet
1 in = 167 ft

Figure 2

Site Map

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Analyte Gr	Analyte Na	CAS Numb	Lab Name	Published I	Units	Matrix	ICP-MS Re	ICP-AES Reporting Limit
Metals	Barium	7440-39-3	Sub	1/1/2015	IS mg/kg	Soil	0.2	0.5
Metals	Beryllium a	7440-41-7	Sub	1/1/2015	IS mg/kg	Soil	0.2	0.5
Metals	Cadmium (	7440-43-9	Sub	1/1/2015	IS mg/kg	Soil	0.2	1
Metals	Chromium,	7440-47-3	Sub	1/1/2015	IS mg/kg	Soil	0.2	2
Metals	Aluminum	7429-90-5	Sub	1/1/2015	IS mg/kg	Soil		75
Metals	Cobalt	7440-48-4	Sub	1/1/2015	IS mg/kg	Soil	0.2	1
Metals	Copper	7440-50-8	Sub	1/1/2015	IS mg/kg	Soil	0.4	2
Metals	Antimony	7440-36-0	Sub	1/1/2015	IS mg/kg	Soil	0.2	3
Metals	Iron	7439-89-6	Sub	1/1/2015	IS mg/kg	Soil	20	25
Metals	Lead and C	7439-92-1	Sub	1/1/2015	IS mg/kg	Soil	0.2	2
Metals	Manganes	7439-96-5	Sub	1/1/2015	IS mg/kg	Soil		1
Metals	Mercury, In	7487-94-7	Sub	1/1/2015	IS mg/kg	Soil		0.02
Metals	Nickel Solu	7440-02-0	Sub	1/1/2015	IS mg/kg	Soil	0.5	1
Metals	Arsenic	7440-38-2	Sub	1/1/2015	IS mg/kg	Soil	0.5	3
Metals	Selenium	7782-49-2	Sub	1/1/2015	IS mg/kg	Soil	0.7	5
Metals	Silver	7440-22-4	Sub	1/1/2015	IS mg/kg	Soil	0.2	2.5
Metals	Thallium (S	7440-28-0	Sub	1/1/2015	IS mg/kg	Soil	0.5	5
Metals	Vanadium,	7440-62-2	Sub	1/1/2015	IS mg/kg	Soil	0.7	1
Metals	Zinc (Metal	7440-66-6	Sub	1/1/2015	IS mg/kg	Soil	2	2
Metals	Calcium	7440-70-2	Sub	1/1/2015	IS mg/kg	Soil		55
Metals	Magnesium	7439-95-4	Sub	1/1/2015	IS mg/kg	Soil	0.5	55
Metals	Potassium	7440-09-7	Sub	1/1/2015	IS mg/kg	Soil		165
Metals	Sodium	7440-43-5	Sub	1/1/2015	IS mg/kg	Soil		100
Metals	Cyanide	57-12-5	Sub	1/1/2015	IS mg/kg	Soil		

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Analyte Group	Analyte Name	CAS Numb	Lab Name	Published I	Units	Matrix	Medium Sc	Low Soil Reporting Limit
VOCs	Acetone	67-64-1	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Acetophenone	98-86-2	CLP	SOM01.2	µg/kg	Soil		50
Pesticides	Aldrin	309-00-2	CLP	SOM01.2	µg/kg	Soil		2
SVOCs	Atrazine	1912-24-9	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Benzaldehyde	100-52-7	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Benzene	71-43-2	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Bis(2-chloroethoxy)methane	111-91-1	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Bis(2-chloroethyl)ether	111-44-4	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Bis(2-ethylhexyl)phthalate	117-81-7	CLP	SOM01.2	µg/kg	Soil		500
VOCs	Bromodichloromethane	75-27-4	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Bromoform	75-25-2	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Bromomethane	74-83-9	CLP	SOM01.2	µg/kg	Soil	200	5
SVOCs	Butyl Benzyl Phthalate	85-68-7	CLP	SOM01.2	µg/kg	Soil		500
SVOCs	Caprolactam	105-60-2	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Carbon Disulfide	75-15-0	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Carbon Tetrachloride	56-23-5	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Chloroaniline, p-	106-47-8	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Chlorobenzene	108-90-7	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Chloroform	67-66-3	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Chloromethane	74-87-3	CLP	SOM01.2	µg/kg	Soil	100	5
SVOCs	Chloronaphthalene, Beta-	91-58-7	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Chlorophenol, 2-	95-57-8	CLP	SOM01.2	µg/kg	Soil		50
Pesticides	Endosulfan I	959-98-8	CLP	SOM01.2	µg/kg	Soil		5
SVOCs	Cresol, o-	95-48-7	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Cresol, p-	106-44-5	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Cresol, p-chloro-m-	59-50-7	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Cyclohexane	110-82-7	CLP	SOM01.2	µg/kg	Soil	50	2
Pesticides	DDD	72-54-8	CLP	SOM01.2	µg/kg	Soil		5
Pesticides	DDE, p,p'-	72-55-9	CLP	SOM01.2	µg/kg	Soil		5
Pesticides	DDT	50-29-3	CLP	SOM01.2	µg/kg	Soil		5
VOCs	Dibromo-3-chloropropane, 1,2-	96-12-8	CLP	SOM01.2	µg/kg	Soil	200	5
VOCs	Dibromochloromethane	124-48-1	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dibromoethane, 1,2-	106-93-4	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Dibutyl Phthalate	84-74-2	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Chloroethane	75-00-3	CLP	SOM01.2	µg/kg	Soil	400	10
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Bromochloromethane	74-97-5	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichlorobenzene, 1,2-	95-50-1	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichlorobenzene, 1,4-	106-46-7	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Dichlorobenzidine, 3,3'-	91-94-1	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Dichlorodifluoromethane	75-71-8	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichloroethane, 1,1-	75-34-3	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichloroethane, 1,2-	107-06-2	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichloroethylene, 1,1-	75-35-4	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichloroethylene, 1,2-cis-	156-59-2	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Dichloroethylene, 1,2-trans-	156-60-5	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Dichlorophenol, 2,4-	120-83-2	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Dichloropropane, 1,2-	78-87-5	CLP	SOM01.2	µg/kg	Soil	50	2
Pesticides	Dieldrin	60-57-1	CLP	SOM01.2	µg/kg	Soil		5
SVOCs	Diethyl Phthalate	84-66-2	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Dimethylphenol, 2,4-	105-67-9	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Dinitro-o-cresol, 4,6-	534-52-1	CLP	SOM01.2	µg/kg	Soil		1000
SVOCs	Dinitrophenol, 2,4-	51-28-5	CLP	SOM01.2	µg/kg	Soil		1000
SVOCs	Dinitrotoluene, 2,4-	121-14-2	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Dinitrotoluene, 2,6-	606-20-2	CLP	SOM01.2	µg/kg	Soil		50
Pesticides	Endosulfan II	33213-65-9	CLP	SOM01.2	µg/kg	Soil		5
Pesticides	Endrin	72-20-8	CLP	SOM01.2	µg/kg	Soil		10
VOCs	Ethylbenzene	100-41-4	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Dibenzofuran	132-64-9	CLP	SOM01.2	µg/kg	Soil		50
Pesticides	Heptachlor	76-44-8	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Heptachlor Epoxide	1024-57-3	CLP	SOM01.2	µg/kg	Soil		10
SVOCs	Hexachlorobenzene	118-74-1	CLP	SOM01.2	µg/kg	Soil		50
Pesticides	Hexachlorocyclohexane, Alpha-	319-84-6	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Hexachlorocyclohexane, Beta-	319-85-7	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	CLP	SOM01.2	µg/kg	Soil		10
SVOCs	Hexachlorocyclopentadiene	77-47-4	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Hexachloroethane	67-72-1	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Hexanone, 2-	591-78-6	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Isophorone	78-59-1	CLP	SOM01.2	µg/kg	Soil		50
VOCs	Methyl Acetate	79-20-9	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Methyl Ethyl Ketone (2-Butanone)	78-93-3	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Methyl tert-Butyl Ether (MTBE)	1634-04-4	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Methylene Chloride	75-09-2	CLP	SOM01.2	µg/kg	Soil	50	15
SVOCs	Nitroaniline, 2-	88-74-4	CLP	SOM01.2	µg/kg	Soil		100
SVOCs	Nitroaniline, 4-	100-01-6	CLP	SOM01.2	µg/kg	Soil		100
SVOCs	Nitrobenzene	98-95-3	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Nitroso-di-N-propylamine, N-	621-64-7	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Nitrosodiphenylamine, N-	86-30-6	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Pentachlorophenol	87-86-5	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Phenol	108-95-2	CLP	SOM01.2	µg/kg	Soil		50
PCBs	Aroclor 1016	12674-11-2	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1221	11104-28-2	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1232	11141-16-5	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1242	53469-21-9	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1248	12672-29-6	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1254	11097-69-1	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1260	11096-82-5	CLP	SOM01.2	µg/kg	Soil		0.01
SVOCs	Acenaphthene	83-32-9	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Anthracene	120-12-7	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Benz[a]anthracene	56-55-3	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Benzo[a]pyrene	50-32-8	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Benzo[b]fluoranthene	205-99-2	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Benzo[k]fluoranthene	207-08-9	CLP	SOM01.2	µg/kg	Soil		20

SVOCs	Chrysene	218-01-9	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Dibenz[a,h]anthracene	53-70-3	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Fluoranthene	206-44-0	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Fluorene	86-73-7	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Indeno[1,2,3-cd]pyrene	193-39-5	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Methylnaphthalene, 2-	91-57-6	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Naphthalene	91-20-3	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Pyrene	129-00-0	CLP	SOM01.2	µg/kg	Soil		20
VOCs	Styrene	100-42-5	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Tetrachloroethane, 1,1,2,2-	79-34-5	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Tetrachloroethylene	127-18-4	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Toluene	108-88-3	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Trichlorobenzene, 1,2,3-	87-61-6	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Trichlorobenzene, 1,2,4-	120-82-1	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Trichloroethane, 1,1,1-	71-55-6	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Trichloroethane, 1,1,2-	79-00-5	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Trichloroethylene	79-01-6	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Trichlorofluoromethane	75-69-4	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Trichlorophenol, 2,4,5-	95-95-4	CLP	SOM01.2	µg/kg	Soil		200
SVOCs	Trichlorophenol, 2,4,6-	88-06-2	CLP	SOM01.2	µg/kg	Soil		200
VOCs	Vinyl Chloride	75-01-4	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Xylene, M,P-	179601-23	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Xylene, o-	95-47-6	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	Benzo(g,h,i)perylene	191-24-2	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Acenaphthylene	208-96-8	CLP	SOM01.2	µg/kg	Soil		20
VOCs	1,4-Dioxane	123-91-1	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Methylcyclohexane	108-87-2	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	cis-1,3-Dichloropropene	10061-01-5	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	trans-1,3-Dichloropropene	10061-02-6	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	Isopropylbenzene	98-82-8	CLP	SOM01.2	µg/kg	Soil	50	2
VOCs	1,3-Dichlorobenzene	541-73-1	CLP	SOM01.2	µg/kg	Soil	50	2
SVOCs	2,2'-Oxybis(1-chloropropane)	108-60-1	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	2-Nitrophenol	88-75-5	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Hexachlorobutadiene	87-68-3	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	1,1'-Biphenyl	92-52-4	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Dimethylphthalate	131-11-3	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	4-Nitrophenol	100-02-7	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	4-Chlorophenyl-phenyl ether	7005-72-3	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	1,2,4,5-Tetrachlorobenzene	95-94-3	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	4-Bromophenyl-phenyl ether	101-55-3	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Phenanthrene	85-01-8	CLP	SOM01.2	µg/kg	Soil		20
SVOCs	Carbazole	86-74-8	CLP	SOM01.2	µg/kg	Soil		50
SVOCs	Di-n-octyl phthalate	117-84-0	CLP	SOM01.2	µg/kg	Soil		500
SVOCs	3-Nitroaniline	99-09-2	CLP	SOM01.2	µg/kg	Soil		100
SVOCs	2,3,4,6-Tetrachlorophenol	58-90-2	CLP	SOM01.2	µg/kg	Soil		50
Pesticides	Delta-BHC	319-86-8	CLP	SOM01.2	µg/kg	Soil		5
Pesticides	Endosulfan Sulfate	1031-97-8	CLP	SOM01.2	µg/kg	Soil		5
Pesticides	Methoxychlor	72-43-5	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Endrin Ketone	53494-70-5	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Endrin Aldehyde	7421-93-4	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Alpha-Chlordane	5103-71-9	CLP	SOM01.2	µg/kg	Soil		2
Pesticides	Gamma-Chlordane	5103-74-2	CLP	SOM01.2	µg/kg	Soil		10
Pesticides	Toxaphene	8001-35-2	CLP	SOM01.2	µg/kg	Soil		100
PCBs	Aroclor 1262	37324-23-5	CLP	SOM01.2	µg/kg	Soil		0.01
PCBs	Aroclor 1268	11100-14-4	CLP	SOM01.2	µg/kg	Soil		0.01
SVOCs	1,4-Dioxane	123-91-1	CLP	SOM01.2	µg/kg	Soil		50

	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 1200 Sixth Avenue, Suite 900 Seattle, Washington 98101-3140 OFFICE OF ENVIRONMENTAL CLEANUP EMERGENCY RESPONSE UNIT	**Region 10 Site-Specific Data Management Plan**			
		Project Name:	Gorst Creek Removal Site	**TDD Number/Site ID:**	16-04-0001/10GL
		Author:	Mark Woodke	**Company:**	Ecology & Environment, Inc.
		Date Initiated:	April 14, 2016	**Last Updated:**	May 16, 2016

This data management plan (DMP) is intended to provide guidance for data collection by field personnel and subsequent data management activities. The data collection and management practices presented in this plan are designed to ensure data integrity and consistency for all data collection personnel and from operational period to the next. Listed in this DMP are data elements, data collection equipment, and data management processes, and end-use products appropriate for supporting the EPA On-Scene Coordinator (OSC). Electronic tools and files used during data management at the site may include a GPS with a data dictionary to gather site specific data, EDD files for laboratory results, field monitoring equipment (such as air monitoring equipment), a SCRIBE database to manage all field data and analytical results, and ArcGIS to manage geospatial data. Manual data entry or Excel spreadsheets will be used to incorporate field notes and historic data when electronic data is not available.

Planning:

DQO #		Decision	Action Level	Data Stream	Tool/Instrument	Meet Decision?	Meet Output?
1	Stockpile Staging, Haul Road, and Command Post Area Soils	Determine if the soil in these areas have an impact on surface soils by collecting samples prior to and after excavation activities	Compare pre- and post-Removal Action sample concentrations	Analytical Results	Commercial Laboratory, Various		

Data Processing

The following table outlines the specific requirements for various data types being collected during the project.

DQO #	Data Source	Required Information	Processing Instructions	Processing Frequency	Processing Responsibility	Storage Location	Final Output [format]
1	Site Documents	Site files, SSSP, SSDMP, logbook	File hard copies and electronic copies in indicated storage location	Beginning of project, and as needed	Project Manager	**Digital:** **Hard Copy:** Site Doc Box	Site file deliverable
1	Scribe	Scribe .mdb	Publish to scribe.net	Daily or as needed	Project Manager	\02 Execution\SCRIBE	scribe.net **Project ID:** TBD Scribe .mdb file
1	Digital Photos	Date, Device ID, Time, Direction, Description, Photographer	Photos will be downloaded from field cameras and exported from Filemaker Photolog and stored in site files	Daily	Data Manager	\02 Execution\Photos	Photos [.jpg], Photographic log [.xls]
1	Sample Information	Sample No, Date, Time, Sampler, Location	Record into Scribe as needed	As Samples are added	Project Manager	Scribe	Chain-of-Custody forms, labels, tabular reports, and/or maps
1	GPS	Location, latitude, longitude	Data will be processed according to the GPS Data Processing SOP and uploaded into Scribe	Conclusion of project	Project Manager and GIS Analyst	**Data:** Scribe **Raw:** \02 Execution\GIS	Tabular reports [.xls] and/or maps [.pdf]

DQO #	Data Source	Required Information	Processing Instructions	Processing Frequency	Processing Responsibility	Storage Location	Final Output [format]
1	Fixed Laboratory Analysis	Measurement	Record on appropriate form or map	Conclusion of project or as needed	Project Manager, START chemist	Data: Scribe Raw: \03 Analytical & QA\Laboratory Data	Tabular reports [.xls]

All electronic files will be written to a CD-ROM or DVD and provided to the Task Monitor. Hard copy files will be assembled and provided to the Task Monitor. Hard copy files will include, but are not limited to logbooks and field forms.

Reporting Requirements

Reporting Task	Data Inputs	Deliverables Format	Frequency	Responsibility
Analytical Data Action Levels	Fixed Laboratory Analysis	.xls, .cvs	Daily	PM

Document Revision Summary

Revision	Date	Description of change
Initial Release (V 1.0)	5/16/16	

Data Source	Required Information	Processing Instructions	Processing Frequency	Processing Responsibility	Storage Location	Final Output [format]
GPS	Location, latitude, longitude	Data will be processed according to the GPS Data Processing SOP and uploaded into Scribe	Conclusion of project	Project Manager and GIS Analyst	Data: Scribe Raw: \02 Execution\GIS	Tabular reports [.xls] and/or maps [.pdf]
Fixed Laboratory Analysis	Location ID, sample number, sample date, sample time, analyte, result, qualifier, unit, MDL	Electronic data will be imported into Scribe	Daily	Project Manager, START chemist	Data: Scribe Raw: \03 Analytical & QA\Laboratory Data	Tabular reports [.xls], Data Memoranda [.pdf]
Digital Photos	Camera ID, Time, Direction, Description, Photographer	Store in Site Files	Daily	Project Manager	\02 Execution\Photos	Photo Log [.pdf]

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