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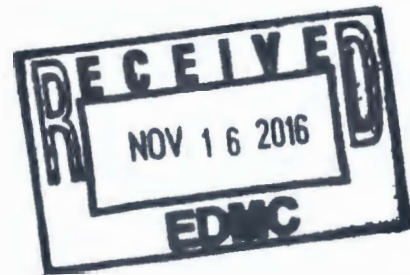
# Comparison of 100-BC-1 and 100-BC-2 Source Operable Unit Exposure Point Concentrations to Soil Screening Levels Protective of Groundwater and Soil Screening Levels Protective of Surface Water

Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy  
under Contract DE-AC06-08RL14788



P.O. Box 1600  
Richland, Washington 99352



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# **Comparison of 100-BC-1 and 100-BC-2 Source Operable Unit Exposure Point Concentrations to Soil Screening Levels Protective of Groundwater and Soil Screening Levels Protective of Surface Water**

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**APPROVED**

*By Lana Perry at 12:34 pm, Oct 19, 2016*

Release Approval

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## ENVIRONMENTAL CALCULATION COVER PAGE

### Section 1: Completed by the Responsible Manager

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**Date:** 03/01/2016

**Calculation Title & Description:** Comparison of 100-BC-1 and 100-BC-2 Source Operable Unit Exposure Point Concentrations to Soil Screening Levels Protective of Groundwater and Soil Screening Levels Protective of Surface Water

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Rev. 0	Revision includes four additional remediated waste sites.	03/01/2016	All	

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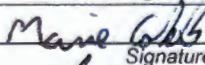
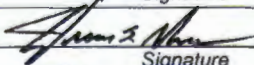
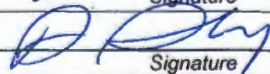
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#### PRIOR TO INITIATING MODELING:

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#### CALCULATION APPROVED:

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<b>Risk/Modeling Integration Manager:</b>	Name / Position	Signature

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## Terms

CERCLA	<i>Comprehensive Environmental Response, Compensation, and Liability Act of 1980</i>
COPC	contaminant of potential concern
DOE	U.S. Department of Energy
ECF	environmental calculation file
EPA	Environmental Protection Agency
EPC	exposure point concentration
FS	feasibility study
OU	operable unit
RDL	required detection limit
RI	remedial investigation
STOMP	Subsurface Transport Over Multiple Phases



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## 1 Purpose

This environmental calculation file (ECF) documents the methodology used to determine if current site conditions for the 100-BC Area based on post-remediation soil sample results exceed scaled soil screening levels for the protection of groundwater and the protection of surface water. The 100-BC Area is associated with two source operable units (OUs): the 100-BC-1 OU and 100-BC-2 OU. These OUs are referred to collectively herein as the 100-BC Source OU. The exposure point concentrations (EPCs) for each waste site decision unit in the 100-BC Source OU are compared to scaled soil screening levels to identify contaminants of potential concern (COPCs) for the protection of the groundwater pathway and for the protection of the surface water pathway. This procedure is consistent with the guidance described in EPA 540/R-96/018, *Soil Screening Guidance: User's Guide*. The identified COPCs will be used to support the remedial investigation/feasibility study (RI/FS) process being conducted for the 100 Areas and 300 Area under the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA).

This ECF supports DOE/RL-2010-96, *Remedial Investigation/Feasibility Study for the 100-BC-1, 100-BC-2, and 100-BC-5 Operable Units*, under CERCLA. A summary based upon the comparison of EPCs to soil screening levels described in this ECF will be presented in the RI/FS report.

## 2 Background

Based on agreements with the Senior Executive Council (DOE/RL-2011-50, *Regulatory Basis and Implementation of a Graded Approach to Evaluation of Groundwater Protection*), modeling with the STOMP simulator (PNNL-15782, *STOMP Subsurface Transport Over Multiple Phases, Version 4: User's Guide*) was performed to provide a basis for estimating soil screening levels for groundwater protection and surface water protection. Unit-length soil screening levels for the protection of groundwater and the protection of surface water were estimated using the STOMP 1D 70:30/100:0 Contaminant Source Model, which is a one-dimensional model that assumes either 70 percent contamination of the vadose zone (upper 70 percent contaminated, lower 30 percent uncontaminated [70:30]) or 100 percent contamination of the vadose zone (zero percent uncontaminated [100:0]) beneath a backfilled waste site. Source distributions are assigned based on analyte distribution coefficients ( $K_d$ ). A 70:30 source distribution is assumed for analytes with a  $K_d \geq 2$  mL/g and a 100:0 source distribution is assumed for analytes with a  $K_d < 2$  mL/g. As implemented for determination of soil screening levels, the STOMP 1D 70:30/100:0 Contaminant Source Model includes recharge from irrigation and assumes that all contamination moves downward with no dispersion, volatilization, or credit for mixing with river water.

Comparisons are first conducted between the analyte-specific SSL that is scaled to the waste site dimension in the direction of groundwater flow and EPC values for each waste site decision unit. Comparisons are then conducted between the EPCs and Hanford Site soil background concentrations. Analytes with EPCs that exceed the selected SSL (the higher of the scaled SSL, 90<sup>th</sup> percentile background concentration, and the required detection limit) are considered COPCs and are carried forward to the RI/FS report.

## 3 Methodology

This section describes the methodology used to compare EPCs for each waste site decision unit to soil screening levels for groundwater protection and surface water protection.



Overburden and stockpile (staging pile) decision units are not evaluated under this methodology. While sampled, this material does not remain in the same location but is used in backfilling waste sites. The models used as the basis of soil screening levels for the protection of groundwater and the protection of surface water using the STOMP 1D 70:30/100:0 contaminant source model presume that the sampled concentrations are present uniformly throughout the upper 70% or 100% of the vadose zone below the backfill. However, this assumption is not applicable to overburden and stockpile (staging pile) material, so derived soil screening levels are not appropriate to apply in these instances.

For all detected analytes measured in the 100-BC waste site decision units, the following steps are performed:

1. Obtain unit-length soil screening levels for the protection of groundwater and the protection of surface water calculated using the STOMP 1D 70:30/100:0 Contaminant Source model.
2. Obtain waste site dimensions parallel to general groundwater flow direction from ECF-100BC5-15-0119, *Determination of Representative Lineal Dimensions for 100-BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations*. Representative lineal dimensions are provided by two methods in ECF-100BC5-15-0119; equivalent area circle radius and intersecting flow vectors. The intersecting flow vectors method lineal distances are selected for use in this evaluation.
3. Divide the unit-length soil screening level by the waste site dimension to obtain a soil screening level that is scaled to the representative waste site decision unit dimension in the general direction of groundwater flow.
4. Obtain EPC values for each waste site decision unit within the 100-BC Source OU.
5. Individually compare EPCs for each waste site decision unit within the 100-BC Source OU to soil screening levels for the protection of groundwater and the protection of surface water scaled to the waste site decision unit representative lineal dimension in the general direction of groundwater flow, or directly compare without scaling in the case of total petroleum hydrocarbons or hexavalent chromium as these values are not scaled.

The previous steps are conducted for all detected analytes in the 100-BC Source OU. The following steps are used to provide a list of analytes with EPCs that are greater than the applicable 90<sup>th</sup> percentile background concentrations.

6. Obtain 90<sup>th</sup> percentile background values.
7. Compare the EPC value to the applicable lognormal 90<sup>th</sup> percentile background value.
8. If the EPC is less than or equal to the lognormal 90<sup>th</sup> percentile background value, then no further comparison is made.
9. If the EPC is greater than the lognormal 90<sup>th</sup> percentile value, then a comparison to soil screening levels scaled to representative lineal dimension in the general direction of groundwater flow, or directly compare without scaling in the case of total petroleum hydrocarbons or hexavalent chromium is made.
10. If a lognormal 90<sup>th</sup> percentile value is not available, then a comparison to soil screening levels scaled to representative lineal dimension in the general direction of groundwater flow, or directly compare without scaling in the case of total petroleum hydrocarbons or hexavalent chromium is made.



11. 12. Obtain the required detection limit.
12. Determine if the scaled SSL concentration is less than the lognormal 90<sup>th</sup> percentile background value and the estimated quantitation limit (EQL). If the scaled SSL concentration is less than the lognormal 90<sup>th</sup> percentile background value and the EQL, then the selected SSL (for groundwater protection or for surface water protection) is established as the higher of the two values. This process is consistent with 2007 MTCA (WAC 173-340-700(6)(d), "Overview of cleanup standards").
13. Determine if EPC is greater than the selected soil screening level identified in Step 12. '=
14. All analytes reported with an EPC greater than the selected SSL for groundwater protection or selected SSL for surface water protection undergo further evaluation to determine if the EPC represents a uniform distribution or whether it represents a single detection above the SSL. Individual sample concentrations are also reviewed to determine if they are within the range of naturally occurring levels, or if the detections represent laboratory contamination.

Analytes that have EPCs that are greater than the selected soil screening level are considered COPCs and are carried forward to the RI/FS report.

## 4 Assumptions and Inputs

Assumptions and inputs associated with soil screening levels, EPCs, and soil background concentrations are described below.

### 4.1 Soil Screening Levels

Table 4-1 documents the source of information for unit-length soil screening levels.

**Table 4-1. Soil Screening Level References**

Soil Screening Level	Pathway	Reference
STOMP 1D 70:30/100:0 Contaminant Source Model	Groundwater	ECF-HANFORD-15-0129
	Surface Water	ECF-HANFORD-15-0129

**Notes:**

ECF-HANFORD-15-0129, *STOMP1-D Modeling for Determination of Unit-Length Soil Screening Levels and Preliminary Remediation Goals for Waste Sites in the 100-BC-1 and 100-BC-2 Source Operable Units. Note, the soil screening levels in this ECF are provided on a unit-length basis, and must be scaled by the representative lineal dimension of the waste site decision unit in the general direction of groundwater flow for evaluation use.*

#### 4.1.1 Soil Screening Levels Protective of Groundwater

Unit-length soil screening levels for the protection of groundwater at and near the 100-BC OU have been derived using the following model:

- STOMP 1D 70:30/100:0 Contaminant Source Model
- The unit-length STOMP 1D groundwater protection soil screening levels for all detected analytes in the 100-BC Source OU are provided in Table 4-2.

The STOMP 1D Contaminant Source Model as implemented for determination of unit-length soil screening levels uses an irrigation recharge scenario and assumes that either the upper 70 percent of the vadose zone is contaminated (for  $K_d \geq 2$  mL/g analytes) or the entire vadose zone is contaminated (for  $K_d < 2$  mL/g analytes) below clean fill. Operable unit-specific unit-length soil screening levels protective of groundwater for the 100-BC OU calculated using the STOMP 70:30/100:0 Contaminant Source Model are document in ECF-HANFORD-15-0129, *STOMP 1-D Modeling for Determination of Unit-Length Soil Screening Levels and Preliminary Remediation Goals for Waste Sites in the 100-BC-1 and 100-BC-2 Source Operable Units*.

#### 4.1.2 Soil Screening Levels Protective of Surface Water

Unit-length soil screening levels for the protection of surface water are used in the River Corridor RI/FS process because the operable units in this area abut surface water. Unit-length soil screening levels for the protection of surface water at and near the 100-BC Source OU have been derived using the following model:

- STOMP 1D 70:30/100:0 Contaminant Source Model
- The unit-length STOMP 1D surface water protection soil screening levels for all detected analytes in the 100-BC Source OU are provided in Table 4-3.

The STOMP 1D Contaminant Source Model as implemented for determination of unit-length soil screening levels uses an irrigation recharge scenario and assumes that either the upper 70 percent of the vadose zone is contaminated (for  $K_d \geq 2$  mL/g analytes) or the entire vadose zone is contaminated (for  $K_d < 2$  mL/g analytes) below clean fill. The model takes no credit for dilution of groundwater by mixing with surface water. Operable unit-specific unit-length soil screening levels protective of surface water for the 100-BC Source OU calculated using the STOMP 1D 70:30/100:0 Contaminant Source Model are documented in ECF-HANFORD-15-0129.

## 4.2 Representative Lineal Dimensions

Waste site dimensions parallel to general groundwater flow direction are from ECF-100BC5-15-0119, *Determination of Representative Lineal Dimensions for 100-BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations*. The waste site dimensions for each waste site decision unit are presented in Table 4-4.

## 4.3 Exposure Point Concentrations

OSWER 9285.6-10, *Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites*, states that, "an exposure point concentration (EPC) is a conservative estimate of the average chemical concentration in an exposure medium." OSWER Publication 9285.7-081, *Supplemental Guidance to RAGS: Calculating the Concentration Term*, states that, "because of the uncertainty associated with estimating the true average concentration at a site, the 95 percent upper confidence limit (UCL) of the arithmetic mean should be used for this variable."

The EPCs used for comparison to soil screening levels scaled to the waste site dimension in the direction of groundwater flow are the analyte-specific values computed from the post-remediation soil sample results for each waste site decision unit in the 100-BC Source OU, as described in ECF-100BC1-11-0012, *Computation of Exposure Point Concentrations for the 100-BC-1 and 100-BC-2 Source Operable Units*. The EPCs for each waste site decision unit are presented in Table 4-5 for the 100-BC Source OU.



#### 4.4 Hanford Site Background

EPA 540-R-01-003, *Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites*, provides national policy considerations for application of background data in risk assessment and remedy selection. This policy recommends an approach that addresses site-specific background issues in the risk characterization. EPA 540-R-01-003 indicates the following:

“COPCs that have both release-related and background-related sources should be included in the risk assessment. When concentrations of naturally occurring elements at a site exceed risk-based screening levels, that information should be discussed qualitatively in the risk characterization.”

EPA 540-R-01-003 defines background constituents as the following: (1) *anthropogenic* - natural and human-made substances present in the environment as a result of human activities (not specifically related to the CERCLA release in question), and (2) *naturally occurring* - substances present in the environment in forms that have not been influenced by human activity.

Lognormal 90<sup>th</sup> percentile background values for the Hanford Site (representative of both naturally occurring and anthropogenic substances) have been developed for inorganic chemicals and identified in DOE/RL-92-24, *Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes*, Summary Table 2. Radionuclide background values are identified in DOE/RL-96-12, *Hanford Site Background: Part 2, Soil Background for Radionuclides*, Table 5-1. ECF-HANFORD-11-0038, *Soil Background Data for Interim Use at the Hanford Site* reports lognormal 90<sup>th</sup> percentile background values for most of the metals that are absent from DOE/RL-92-24. The analyte-specific background concentrations are presented in Table 4-6.

#### 4.5 Required Detection Limits

The required detection limit (RDL) is the lowest concentration that can be reliably measured within specific limits of accuracy and precision under routine laboratory operating conditions. The RDL is specified by the laboratory and is typically 5 – 10 times greater than the method detection limit. In some cases, the RDL is equal to the concentration of the lowest calibration standard. The EQLs presented in this environmental calculation file were obtained from DOE/RL-96-17, *Remedial Design Report/Remedial Action Work Plan for the 100 Area*. The analyte-specific RDL values are presented in Tables 4-2 and 4-3.

### 5 Software Applications

Microsoft Excel<sup>®</sup> was used to tabulate the data in electronic spreadsheets. These spreadsheets are provided as tables that accompany this environmental calculation.

### 6 Calculation

Contaminants of potential concern for groundwater protection and surface water protection at the 100-BC Source OU are identified by comparing EPCs to soil screening levels scaled to the waste site dimension in the direction of groundwater flow, background concentrations, and lastly the selected SSL for groundwater protection or the selected SSL for surface water protection, as described in Section 3. The

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<sup>®</sup> Microsoft Excel is a registered trademark of the Microsoft Corporation in the United States and in other countries.

results of this comparison are provided in summary in Section 7. The comparison tables all share a similar format, providing both the values being compared as well as a "Yes/No" column indicating the outcome of the comparison.

## 7 Results/Conclusions

Analytes that have an EPC that is greater than the 90<sup>th</sup> percentile background concentration as well as the selected soil screening level are considered COPCs to be carried forward for further analysis.

Comparison of the 100-BC OU waste site decision unit EPCs to scaled soil screening levels for groundwater protection and for surface water protection, *without consideration of soil background concentrations*, are presented in Tables 7-1 and 7-2, respectively. Unit-length soil screening levels are scaled by the representative length of each waste site decision unit in the general direction of groundwater flow for comparison to EPC values.

Comparison of the 100-BC Source OU waste site decision unit EPCs to soil background concentrations is presented in Table 7-3.

Comparison of the 100-BC Source OU waste site decision unit EPCs to selected soil screening levels for groundwater protection and for surface water protection, *as well as soil background concentrations*, are presented in Tables 7-4 and 7-5, respectively. The selected SSL is the highest value between the unit-length soil screening level scaled by the representative length of each waste site decision unit in the general direction of groundwater flow, the 90<sup>th</sup> percentile background concentration, or the RDL for comparison to EPC values.

Comparison results shown in Table 7-4 indicate the 100-BC-5 Source OU has the following 24 COPCs for groundwater protection:

- 2,4,5-T, 2,4,5-TP, 2,4-DB, acetone, beta-BHC, boron, cadmium, carbazole, carbon tetrachloride, copper, dibenzofuran, dicamba, fluorene, heptachlor, iron, methylene chloride, naphthalene, pentachlorophenol, selenium, silver, technetium-99, strontium-90, tritium, and zinc.

Comparison results shown in Table 7-5 indicate the 100-BC-5 Source OU has the following 13 COPCs for surface water protection:

- cadmium, copper, dieldrin, endosulfan I, endosulfan II, endrin, heptachlor, iron, mercury, pentachlorophenol, selenium, silver, and zinc.

All of the analytes reported with an EPC greater than their respective selected soil screening level were further evaluated. This evaluation consists of reviewing individual reported sample concentrations from each decision unit and evaluating data quality, the basis of the EPC. For example, the EPC is reviewed to determine if it represents a uniform distribution or whether it represents a single detection above the SSL. Additionally, individual sample concentrations are reviewed to determine if they are within the range of naturally occurring levels, or if the detections represent laboratory contamination.

The results of this evaluation are presented in Table 7-6 for groundwater protection and in Table 7-7 for surface water protection. With the exception of strontium-90, the results of this review indicate that the analytes reported with EPCs greater than the scaled STOMP 1D SSLs will not be carried forward as COPCs and do not warrant comparison to preliminary remediation goals (PRGs) developed for protection of groundwater or surface water. Concentrations of strontium-90 at remediated waste site 116-C-1 are above the SSLs for groundwater protection and will be compared to PRGs for groundwater protection.

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Table 4-2. Summary of Soil Screening Levels for Groundwater Protection

CAS No.	Analyte	Distribution Coefficient ( $K_d$ ) Value (mL/g) <sup>a</sup>	Groundwater Standard (pCi/L or µg/L) <sup>a</sup>	Required Detection Limit (pCi/g, µg/kg) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>c</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )
<b>Radionuclides</b>					
14596-10-2	Americium-241	200	15	1	-- <sup>d</sup>
14762-75-5	Carbon-14	200	2,000	2	-- <sup>d</sup>
10045-97-3	Cesium-137	50	200	0.1	-- <sup>d</sup>
10198-40-0	Cobalt-60	50	100	0.05	-- <sup>d</sup>
14683-23-9	Europium-152	200	200	0.1	-- <sup>d</sup>
15585-10-1	Europium-154	200	60	0.1	-- <sup>d</sup>
14391-16-3	Europium-155	200	600	0.1	-- <sup>d</sup>
13981-37-8	Nickel-63	30	50	30	-- <sup>d</sup>
14681-63-1	Niobium-94	200	--	0.2	-- <sup>e</sup>
13981-16-3	Plutonium-238	200	15	1	-- <sup>d</sup>
PU-239/240	Plutonium-239/240	200	15	1	-- <sup>d</sup>
SR-RAD	Total beta radiostrontium	25	8.0	1	2,121
14133-76-7	Technetium-99	0	900	0.25	2.2
10028-17-8	Tritium	0	20,000	10	60
U-233/234	Uranium-233/234	--	--	1	-- <sup>e</sup>
13966-29-5	Uranium-234	--	--	1	-- <sup>e</sup>
15117-96-1	Uranium-235	--	--	0.5	-- <sup>e</sup>
U-238	Uranium-238	--	--	1	-- <sup>e</sup>
<b>Nonradionuclides</b>					
120-82-1	1,2,4-Trichlorobenzene	1.7	1.5	330	330
94-75-7	2,4-D(2,4-Dichlorophenoxyacetic acid)	0.03	70	400	400
94-82-6	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	0.098	128	100	705
93-76-5	2,4,5-T(2,4,5-Trichlorophenoxyacetic acid)	0.11	160	20	941
93-72-1	2,4,5-TP(2-(2,4,5-Trichlorophenoxy)propionic acid)Silvex	0.18	50	20	415
78-93-3	2-Butanone	0.0045	4,800	10	12,162
91-57-6	2-Methylnaphthalene	2.5	32	330	2,896
72-54-8	4,4'-DDD (Dichlorodiphenyldichloroethane)	46	0.36	3.3	836,540
72-55-9	4,4'-DDE (Dichlorodiphenyldichloroethylene)	86	0	3.3	-- <sup>d</sup>
50-29-3	4,4'-DDT (Dichlorodiphenyltrichloroethane)	678	0.26	3.3	-- <sup>d</sup>
1918-02-1	4-Amino-3,5,6-trichloropicolinic acid	0.039	500	---	1,806
108-10-1	4-Methyl-2-pentanone	0.013	640	---	1,783
83-32-9	Acenaphthene	4.9	480	330	84,728
67-64-1	Acetone	6.00E-04	7,200	20	17,372
309-00-2	Aldrin	49	0.0030	1.7	9,878
319-84-6	Alpha-BHC	1.8	0.014	1.7	1.65
5103-71-9	Alpha-Chlordane	51	0.25	17	1.42E+06
7429-90-5	Aluminum	1,500	16,000	---	-- <sup>d</sup>
120-12-7	Anthracene	24	2,400	330	4.27E+07



Table 4-2. Summary of Soil Screening Levels for Groundwater Protection

CAS No.	Analyte	Distribution Coefficient ( $K_d$ ) Value (mL/g) <sup>a</sup>	Groundwater Standard (pCi/L or $\mu\text{g/L}$ ) <sup>a</sup>	Required Detection Limit (pCi/g, $\mu\text{g/kg}$ ) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>c</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$
7440-36-0	Antimony	45	6.0	600	1.19E+07
11104-28-2	Aroclor-1221	8.4	0,000	17	16.5
53469-21-9	Aroclor-1242	78	0.040	17	— <sup>d</sup>
11097-69-1	Aroclor-1254	131	0.040	17	— <sup>d</sup>
11096-82-5	Aroclor-1260	822	0.044	17	— <sup>d</sup>
7440-38-2	Arsenic	29	0.058	10,000	10,000
7440-39-3	Barium	41	2,000	2,000	3.89E+08
71-43-2	Benzene	0.062	1.0	5.0	5.0
56-55-3	Benzo(a)anthracene	358	0.12	15	— <sup>d</sup>
50-32-8	Benzo(a)pyrene	969	0.012	15	— <sup>d</sup>
205-99-2	Benzo(b)fluoranthene	1,230	0.12	15	— <sup>d</sup>
207-08-9	Benzo(k)fluoranthene	1,230	0.12	15	— <sup>d</sup>
7440-41-7	Beryllium	790	4.0	500	— <sup>d</sup>
319-85-7	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	2.1	0.049	1.7	3.8
117-81-7	Bis(2-ethylhexyl) phthalate	111	0,006	330	— <sup>d</sup>
7440-42-8	Boron	3.0	3,200	2,000	348,488
85-68-7	Butylbenzylphthalate	14	46	330	60,438
7440-43-9	Cadmium	6.7	5.0	500	1,256
86-74-8	Carbazole	3.4	4.4	330	537
56-23-5	Carbon tetrachloride	0.15	1.0	5.0	5.0
57-74-9	Chlordane	51	0.30	1.7	1.42E+06
7440-47-3	Chromium	1,000	100	1,000	— <sup>d</sup>
218-01-9	Chrysene	398	1.2	100	— <sup>d</sup>
7440-48-4	Cobalt	45	4.8	2,000	9.52E+06
7440-50-8	Copper	22	640	1,000	7.69E+06
75-99-0	Dalapon	0.0032	200	100	499
53-70-3	Dibenz[a,h]anthracene	1,789	0.12	30	— <sup>d</sup>
132-64-9	Dibenzofuran	9.2	8.0	330	3,353
1918-00-9	Dicamba	0.029	480	100	1,582
60-57-1	Dieldrin	26	0.010	3.3	166
84-66-2	Diethylphthalate	0.082	12,800	330	63,829
84-74-2	Di-n-butylphthalate	1.6	1,600	330	88,471
117-84-0	Di-n-octylphthalate	83,200	192	330	— <sup>d</sup>
88-85-7	Dinoseb(2-secButyl-4,6-dinitrophenol)	4.3	7.0	10	1,082
959-98-8	Endosulfan I	2.0	96	3	7,192
33213-65-9	Endosulfan II	2.0	96	3	7,192
72-20-8	Endrin	11	2.0	3	1,219
206-44-0	Fluoranthene	49	640	330	3.89E+08
86-73-7	Fluorene	7.7	320	330	97,154
16984-48-8	Fluoride	150	960	5,000	— <sup>d</sup>
58-89-9	Gamma-BHC (Lindane)	1.4	0.080	1.7	3.8
76-44-8	Heptachlor	9.5	0.020	2	8.7
1024-57-3	Heptachlor epoxide	83	0.0050	2	— <sup>d</sup>
18540-29-9	Hexavalent Chromium	0.80	48	1,000	6,000 <sup>f</sup>
193-39-5	Indeno(1,2,3-cd)pyrene	3,470	0.12	330	— <sup>d</sup>
7439-89-6	Iron	25	11,200	---	2.92E+08
78-59-1	Isophorone	0.047	46	330	330



Table 4-2. Summary of Soil Screening Levels for Groundwater Protection

CAS No.	Analyte	Distribution Coefficient ( $K_d$ ) Value (mL/g) <sup>a</sup>	Groundwater Standard (pCi/L or µg/L) <sup>a</sup>	Required Detection Limit (pCi/g, µg/kg) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>c</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$
7439-92-1	Lead	10,000	15	5,000	— <sup>d</sup>
7439-93-2	Lithium	300	32	2,500	— <sup>d</sup>
7439-96-5	Manganese	65	0,384	5,000	3.89E+08
7439-97-6	Mercury	52	2.0	200	1.34E+07
72-43-5	Methoxychlor	80	40	20	— <sup>d</sup>
75-09-2	Methylene chloride	0.010	5.0	5.0	14
7439-98-7	Molybdenum	20	0,080	2,000	563,885
91-20-3	Naphthalene	1.2	160	330	6,798
7440-02-0	Nickel	65	100	4,000	3.89E+08
14797-55-8	Nitrate	0	45,000	2,500	107,743
NO2+NO3-N	Nitrogen in Nitrite and Nitrate	0	10,000	750	23,943
86-30-6	n-Nitrosodiphenylamine	1.3	0,018	330	819
87-86-5	Pentachlorophenol	0.59	0.20	330	330
108-95-2	Phenol	0.029	2,400	330	7,909
129-00-0	Pyrene	68	240	330	3.89E+08
7782-49-2	Selenium	5.0	50	1,000	9,013
7440-22-4	Silver	8.3	0,080	200	27,530
7440-24-6	Strontium	35	9,600	1,000	3.89E+08
100-42-5	Styrene	0.91	100	---	3,305
7440-31-5	Tin	250	9,600	10,000	— <sup>d</sup>
108-88-3	Toluene	0.14	640	5.0	4,437
TPH	Total petroleum hydrocarbons	4.0	500	---	1.00E+06 <sup>e</sup>
TPHDIESEL	Total petroleum hydrocarbons - diesel range	4.0	500	---	2.00E+06 <sup>e</sup>
TPHDIESELEXT	Total petroleum hydrocarbons - diesel range extended to C36	4.0	500	---	2.00E+06 <sup>e</sup>
TPH/OILH	Total petroleum hydrocarbons - motor oil (high boiling)	4.0	500	---	2.00E+06 <sup>e</sup>
Total_U_Isotopes	Total_U_Isotopes	— <sup>h</sup>	---	---	NVR <sup>h</sup>
79-01-6	Trichloroethene	0.094	0.54	5.0	5.0
7440-61-1	Uranium	— <sup>h</sup>	30	---	NVR <sup>h</sup>
7440-62-2	Vanadium	1,000	80	2,500	— <sup>d</sup>
1330-20-7	Xylenes (total)	0.23	1,600	1.0	16,314
7440-66-6	Zinc	62	4,800	1,000	3.89E+08

## Notes:

a. Selection of distribution coefficients ( $K_d$  values) and groundwater standard described in ECF-HANFORD-12-0023, Rev. 3.

b. Required detection limits (RDLs) are obtained from DOE/RL-96-17, *Remedial Design Report/Remedial Action Work Plan for the 100 Area* (Table 2-1) or from DOE/RL-2009-44, *Sampling and Analysis Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable units Remedial Investigation Feasibility Study* (Appendix A; Table A-1 through A-11) when not published in DOE/RL-96-17. The STOMP 1D soil screening level for all analytes defaults to the EQL when the calculated value is less than the EQL.

c. ECF-HANFORD-15-0129. A 70:30 source distribution is used for analytes with  $K_d \geq 2$  mL/g; a 100:0 source distribution is used for analytes with  $K_d < 2$  mL/g. These soil screening levels protective of groundwater and protective of surface water are provided on a unit-length basis. To apply these soil screening levels, divide the listed value by a representative length across the waste site decision unit in the general direction of groundwater flow to obtain the soil screening level for evaluation use. (Note that this scaling is not applicable to soil cleanup levels for arsenic, hexavalent chromium, or TPH-diesel.)

Table 4-2. Summary of Soil Screening Levels for Groundwater Protection

CAS No.	Analyte	Distribution Coefficient (K <sub>d</sub> ) Value (mL/g) <sup>a</sup>	Groundwater Standard (pCi/L or µg/L) <sup>a</sup>	Required Detection Limit (pCi/g, µg/kg) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>c</sup> $\left( \frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m \right)$
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d. The calculated soil screening level for the analyte is considered non-representative because: (1) breakthrough is simulated within 1,000 years for some soil columns while other soil columns (a majority) show no breakthrough (breakthrough defined as concentrations below 1E-04 µg/L or activity below 1E-04 pCi/L), and/or (2) the calculated residual mass of contaminant in the pore volume is high enough to represent a substantial (and physically improbable) reduction in porosity.

e. A "NA" was assigned when a drinking water standard was not available.

f. The soil screening level for hexavalent chromium is set to 6,000 µg/kg based on the evaluation in ECF-Hanford-11-0165; this value is not dependent on waste site size.

g. The soil screening levels for Total Petroleum Hydrocarbons are screening levels obtained from WAC 173-340-900, Table 747-5, "Residual Saturation Screening Levels for TPH."

h. No Value Required. Uranium is not modeled because uranium was not detected at levels above Hanford site background at any remediated waste site in 100-BC, therefore it is not a soil COPC.

-- = Not Applicable



Table 4-3. Summary of Soil Screening Levels for Surface Water Protection

CAS No.	Analyte	Distribution Coefficient ( $K_d$ ) Value (mL/g) <sup>a</sup>	Surface Water Standard or Criterion (µg/L)	Required Detection Limit (pCi/g, µg/kg) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>c</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )
<b>Radionuclides</b>					
14596-10-2	Americium-241	200	—	1.0	— <sup>d</sup>
14762-75-5	Carbon-14	200	—	—	— <sup>d</sup>
10045-97-3	Cesium-137	50	—	0.10	— <sup>d</sup>
10198-40-0	Cobalt-60	50	—	0.050	— <sup>d</sup>
14683-23-9	Europium-152	200	—	0.10	— <sup>d</sup>
15585-10-1	Europium-154	200	—	0.10	— <sup>d</sup>
14391-16-3	Europium-155	200	—	0.10	— <sup>d</sup>
13981-37-8	Nickel-63	30	—	—	— <sup>d</sup>
14681-63-1	Niobium-94	200	—	—	— <sup>d</sup>
13981-16-3	Plutonium-238	200	—	1.0	— <sup>d</sup>
PU-239/240	Plutonium-239/240	200	—	1.0	— <sup>d</sup>
SR-RAD	Total beta radiostrontium	25	—	—	— <sup>d</sup>
14133-76-7	Technetium-99	0	—	—	— <sup>d</sup>
10028-17-8	Tritium	0	—	—	— <sup>d</sup>
U-233/234	Uranium-233/234	—	—	1.0	— <sup>d</sup>
13966-29-5	Uranium-234	—	—	1.0	— <sup>d</sup>
15117-96-1	Uranium-235	—	—	0.5	— <sup>d</sup>
U-238	Uranium-238	—	—	1.0	— <sup>d</sup>
<b>Nonradionuclides</b>					
120-82-1	1,2,4-Trichlorobenzene	1.7	—	330	— <sup>d</sup>
94-75-7	2,4-D(2,4-Dichlorophenoxyacetic acid)	0.030	—	400	— <sup>d</sup>
94-82-6	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	0.098	—	100	— <sup>d</sup>
93-76-5	2,4,5-T(2,4,5-Trichlorophenoxyacetic acid)	0.11	—	20	— <sup>d</sup>
93-72-1	2,4,5-TP(2-(2,4,5-Trichlorophenoxy)propionic acid)Silvex	0.18	—	20	— <sup>d</sup>
78-93-3	2-Butanone	0.0045	—	10	— <sup>d</sup>
91-57-6	2-Methylnaphthalene	2.5	—	330	— <sup>d</sup>
72-54-8	4,4'-DDD (Dichlorodiphenyldichloroethane)	46	—	3.3	— <sup>d</sup>
72-55-9	4,4'-DDE (Dichlorodiphenyldichloroethylene)	86	—	3.3	— <sup>d</sup>
50-29-3	4,4'-DDT (Dichlorodiphenyltrichloroethane)	678	0.001	3.3	— <sup>e</sup>
1918-02-1	4-Amino-3,5,6-trichloropicolinic acid	0.039	—	—	— <sup>d</sup>
108-10-1	4-Methyl-2-pentanone	0.013	—	—	— <sup>d</sup>
83-32-9	Acenaphthene	4.9	—	330	— <sup>d</sup>
67-64-1	Acetone	6.00E-04	—	20	— <sup>d</sup>
309-00-2	Aldrin	49	0.0019	1.7	7,293
319-84-6	Alpha-BHC	1.8	—	1.7	— <sup>d</sup>
5103-71-9	Alpha-Chlordane	51	0.0043	17	24,442
7429-90-5	Aluminum	1,500	87	—	— <sup>a</sup>
120-12-7	Anthracene	24	—	330	— <sup>d</sup>
7440-36-0	Antimony	45	—	600	— <sup>d</sup>
11104-28-2	Aroclor-1221	8.4	0.014	17	17
53469-21-9	Aroclor-1242	78	0.014	17	— <sup>e</sup>
11097-69-1	Aroclor-1254	131	0.014	17	— <sup>e</sup>
11096-82-5	Aroclor-1260	822	0.014	17	— <sup>e</sup>
7440-38-2	Arsenic	29	150	10	1.05E+07
7440-39-3	Barium	41	—	2,000	— <sup>d</sup>
71-43-2	Benzene	0.062	—	5.0	— <sup>d</sup>
56-55-3	Benzo(a)anthracene	358	—	15	— <sup>d</sup>
50-32-8	Benzo(a)pyrene	969	—	15	— <sup>d</sup>
205-99-2	Benzo(b)fluoranthene	1,230	—	15	— <sup>d</sup>
207-08-9	Benzo(k)fluoranthene	1,230	—	15	— <sup>d</sup>
7440-41-7	Beryllium	790	—	500	— <sup>d</sup>

Table 4-3. Summary of Soil Screening Levels for Surface Water Protection

CAS No.	Analyte	Distribution Coefficient ( $K_d$ ) Value (mL/g) <sup>a</sup>	Surface Water Standard or Criterion (µg/L)	Required Detection Limit (pCi/g, µg/kg) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>c</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )
319-85-7	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	2.1	--	1.7	-- <sup>d</sup>
117-81-7	Bis(2-ethylhexyl) phthalate	111	--	330	-- <sup>d</sup>
7440-42-8	Boron	3.0	--	2,000	-- <sup>d</sup>
85-68-7	Butylbenzylphthalate	14	--	330	-- <sup>d</sup>
7440-43-9	Cadmium	6.7	0.22	500	500
86-74-8	Carbazole	3.4	--	330	-- <sup>d</sup>
56-23-5	Carbon tetrachloride	0.15	--	5.0	-- <sup>d</sup>
57-74-9	Chlordane	51	0.0043	1.7	24,442
7440-47-3	Chromium	1,000	65	1,000	-- <sup>e</sup>
218-01-9	Chrysene	398	--	100	-- <sup>d</sup>
7440-48-4	Cobalt	45	--	2,000	-- <sup>d</sup>
7440-50-8	Copper	22	7.8	1,000	93,717
75-99-0	Dalapon	0.0032	--	100	-- <sup>d</sup>
53-70-3	Dibenz[a,h]anthracene	1,789	--	30	-- <sup>d</sup>
132-64-9	Dibenzofuran	9.2	--	330	-- <sup>d</sup>
1918-00-9	Dicamba	0.029	--	100	-- <sup>d</sup>
60-57-1	Dieldrin	26	0.0019	3.3	58
84-66-2	Diethylphthalate	0.082	--	330	-- <sup>d</sup>
84-74-2	Di-n-butylphthalate	1.6	--	330	-- <sup>d</sup>
117-84-0	Di-n-octylphthalate	83,200	--	330	-- <sup>d</sup>
88-85-7	Dinoseb(2-secButyl-4,6-dinitrophenol)	4.3	--	10	-- <sup>d</sup>
959-98-8	Endosulfan I	2.0	0.056	3	4.2
33213-65-9	Endosulfan II	2.0	0.056	3	4.2
72-20-8	Endrin	11	0.0023	3	3
206-44-0	Fluoranthene	49	--	330	-- <sup>d</sup>
86-73-7	Fluorene	7.7	--	330	-- <sup>d</sup>
16984-48-8	Fluoride	150	--	5,000	-- <sup>d</sup>
58-89-9	Gamma-BHC (Lindane)	1.4	0.080	1.7	3.8
76-44-8	Heptachlor	9.5	0.0038	2	2
1024-57-3	Heptachlor epoxide	83	0.0038	2	-- <sup>e</sup>
18540-29-9	Hexavalent Chromium	0.80	48	1,000	6,000 <sup>f</sup>
193-39-5	Indeno[1,2,3-cd]pyrene	3,470	--	330	-- <sup>d</sup>
7439-89-6	Iron	25	1,000	---	2.61E+07
78-59-1	Isophorone	0.047	--	330	-- <sup>d</sup>
7439-92-1	Lead	10,000	2.1	5,000	-- <sup>e</sup>
7439-93-2	Lithium	300	--	2,500	-- <sup>d</sup>
7439-96-5	Manganese	65	--	5,000	-- <sup>d</sup>
7439-97-6	Mercury	52	0.012	200	80,585
72-43-5	Methoxychlor	80	0.030	20	-- <sup>e</sup>
75-09-2	Methylene chloride	0.010	--	5.0	-- <sup>d</sup>
7439-98-7	Molybdenum	20	--	2,000	-- <sup>d</sup>
91-20-3	Naphthalene	1.2	--	330	-- <sup>d</sup>
7440-02-0	Nickel	65	45	4,000	3.89E+08
14797-55-8	Nitrate	0	--	2,500	-- <sup>d</sup>
NO2+NO3-N	Nitrogen in Nitrite and Nitrate	0	--	750	-- <sup>d</sup>
86-30-6	n-Nitrosodiphenylamine	1.3	--	330	-- <sup>d</sup>
87-86-5	Pentachlorophenol	0.59	13	330	330
108-95-2	Phenol	0.029	--	330	-- <sup>d</sup>
129-00-0	Pyrene	68	--	330	-- <sup>d</sup>
7782-49-2	Selenium	5.0	5.0	1,000	1,000
7440-22-4	Silver	8.3	2.4	200	826
7440-24-6	Strontium	35	--	1,000	-- <sup>d</sup>
100-42-5	Styrene	0.91	--	---	-- <sup>d</sup>
7440-31-5	Tin	250	--	10,000	-- <sup>d</sup>
108-88-3	Toluene	0.14	--	5.0	-- <sup>d</sup>
TPH	Total petroleum hydrocarbons	4.0	--	---	-- <sup>d</sup>
TPHDIESEL	Total petroleum hydrocarbons - diesel range	4.0	--	---	-- <sup>d</sup>



Table 4-3. Summary of Soil Screening Levels for Surface Water Protection

CAS No.	Analyte	Distribution Coefficient ( $K_d$ ) Value (mL/g) <sup>a</sup>	Surface Water Standard or Criterion (μg/L)	Required Detection Limit (pCi/g, μg/kg) <sup>b</sup>	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>c</sup> $\left( \frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m \right)$
TPHDIESELEXT	Total petroleum hydrocarbons - diesel range extended to C36	4.0	—	—	— <sup>d</sup>
TPH/OILH	Total petroleum hydrocarbons - motor oil (high boiling)	4.0	—	—	— <sup>d</sup>
Total_U_Isotopes	Total_U_Isotopes	— <sup>e</sup>	—	—	— <sup>g</sup>
79-01-6	Trichloroethene	0.094	—	5.0	— <sup>d</sup>
7440-61-1	Uranium	NVR <sup>f</sup>	—	—	— <sup>g</sup>
7440-62-2	Vanadium	1,000	—	2,500	— <sup>d</sup>
1330-20-7	Xylenes (total)	0.23	—	1.0	— <sup>d</sup>
7440-66-6	Zinc	62	91	1,000	3.89E+08

## Notes:

a. Selection of distribution coefficients ( $K_d$  values) and surface water standard described in ECF-HANFORD-12-0023, Rev. 3.

b. Required detection limits (RDLs) are obtained from DOE/RL-96-17, *Remedial Design Report/Remedial Action Work Plan for the 100 Area* (Table 2-1) or from DOE/RL-2009-44, *Sampling and Analysis Plan for the 100-BC-1, 100-BC-2 and 100-BC-5 Operable units Remedial Investigation Feasibility Study* (Appendix A; Table Table A-1 through A-11) when not published in DOE/RL-96-17. The STOMP 1D soil screening level for all analytes defaults to the EQL when the calculated value is less than the EQL.

c. ECF-HANFORD-15-0129. A 70:30 source distribution is used for analytes with  $K_d \geq 2$  mL/g; a 100:0 source distribution is used for analytes with  $K_d < 2$  mL/g. These soil screening levels protective of groundwater and protective of surface water are provided on a unit-length basis. To apply these soil screening levels, divide the listed value by a representative length across the waste site decision unit in the general direction of groundwater flow to obtain the soil screening level for evaluation use. (Note that this scaling is not applicable to soil cleanup levels for arsenic, hexavalent chromium, or TPH-diesel.)

d. A soil screening level is not calculated because a surface water quality standard is not available for the analyte.

e. The calculated soil screening level for the analyte is considered non-representative because: (1) breakthrough is simulated within 1,000 years for some soil columns while other soil columns (a majority) show no breakthrough (breakthrough defined as concentrations below  $1E-04$  μg/L or activity below  $1E-04$  pCi/L), and/or (2) the calculated residual mass of contaminant in the pore volume is high enough to represent a substantial (and physically improbable) reduction in porosity.

f. The soil screening level for hexavalent chromium is set to 6,000 μg/kg based on the evaluation in ECF-Hanford-11-0165; this value is not dependent on waste site size.

g. No Value Required. No Value Required. Uranium is not modeled because uranium was not detected at levels above Hanford site background at any remediated waste site in 100-BC, therefore it is not a soil COPC.

— = Not Applicable

**Table 4-4. Waste Site Dimensions Parallel to General Groundwater Flow for the 100-BC Source Operable Units**

<b>Waste Site/Decision Unit</b>	<b>Width in Prominent GW Flow Direction (meters)</b>
100-B-1_Shallow_1	58.6
100-B-1_Shallow_2	80.3
100-B-1_Shallow_Focused	37.8
100-B-11_Shallow_Focused	2
100-B-14:1_Deep	18.4
100-B-14:1_Deep_Focused	2
100-B-14:1_Overburden_2	664.1
100-B-14-1_Overburden_4	97.6
100-B-14-1_Overburden_5	102.9
100-B-14-1_Overburden_6	111.6
100-B-14-1_Overburden_7	215.9
100-B-14-1_Overburden_8	56.4
100-B-14-1_Overburden_9	57.9
100-B-14:1_Shallow	44.6
100-B-14:2_Overburden_Focused	33.9
100-B-14:2_Shallow_1	59.2
100-B-14:2_Shallow_2	12.2
100-B-14:2_Shallow_3	19.3
100-B-14:2_Shallow_Focused	2
100-B-14:3_Deep_Focused	2
100-B-14:5_Shallow_Focused	0.01
100-B-14:6_Shallow_Focused	10.9
100-B-14:7_Shallow_Focused	5.7
100-B-16_Shallow_Focused	11.2
100-B-18_Shallow_Focused	19.7
100-B-19_Shallow_1	63.7
100-B-19_Shallow_2	16.4
100-B-19_Shallow_4	36
100-B-19_Shallow_5	25.2
100-B-19_Shallow_Focused	219
100-B-19_Staging pile area	14.1
100-B-19_Staging pile area_Focused	8.8
100-B-20_Shallow_Focused	3.2
100-B-21:2_Overburden_Focused	12.1
100-B-21:2_Shallow	33
100-B-21:3_Overburden_Focused	7.5
100-B-21:3_Shallow	9.2
100-B-21:3_Staging pile area_Focused	9.4
100-B-21:4_Overburden_Focused	48.4
100-B-21:4_Shallow	29.5
100-B-21:4_Staging pile area	21.8
100-B-22:2_Shallow_Focused	126.3



**Table 4-4. Waste Site Dimensions Parallel to General Groundwater Flow for the 100-BC Source Operable Units**

<b>Waste Site/Decision Unit</b>	<b>Width in Prominent GW Flow Direction (meters)</b>
100-B-22:2_Staging pile area_Focused	6.6
100-B-23_Shallow_Focused	1237.8
100-B-25_Overburden_Focused	58.6
100-B-25_Shallow	48
100-B-25_Staging pile area	29.9
100-B-26_Shallow_Focused	31.7
100-B-27_Deep	47.1
100-B-27_Overburden_Focused	73.8
100-B-27_Staging pile area	34.6
100-B-28_Overburden_Focused	14.8
100-B-28_Shallow_1	24.9
100-B-28_Shallow_3	19.3
100-B-28_Shallow_5	22
100-B-28_Shallow_Focused	150.6
100-B-28_Staging pile area_2	70.2
100-B-28_Staging pile area_4	4.3
100-B-31_Shallow	15.1
100-B-32_Shallow_Focused	2
100-B-33_Shallow_Focused	4.2
100-B-33_Staging pile area_Focused	4.4
100-B-35:1_Deep_Focused	22.2
100-B-35:1_Shallow	122
100-B-35:1_Staging Pile Area	101.5
100-B-35:2_Shallow_Focused	15.9
100-B-5_Deep	27.6
100-B-5_Shallow	52.2
100-B-8:1_Deep	28.9
100-B-8:1_Overburden	43.2
100-B-8:1_Shallow	48.6
100-B-8:2_Deep	19.2
100-B-8:2_Overburden	65.3
100-B-8:2_Shallow_1	30.9
100-B-8:2_Shallow_3	49.7
100-C-3_Shallow	8.6
100-C-7:1_Overburden_Focused_1	117.8
100-C-7:1_Overburden_Focused_23	52.1
100-C-7:1_Overburden_Focused_24	26.2
100-C-7:1_Overburden_Focused_30	55.8
100-C-7:1_Overburden_West_Focused	146.9
100-C-7:1_Shallow_1	55.4
100-C-7:1_Shallow_2	51.6
100-C-7:1_Shallow_3	103.5

**Table 4-4. Waste Site Dimensions Parallel to General Groundwater Flow for the 100-BC Source Operable Units**

<b>Waste Site/Decision Unit</b>	<b>Width in Prominent GW Flow Direction (meters)</b>
100-C-7:1_Staging Pile Area_1	50.7
100-C-7:1_Staging Pile Area_2	70.6
100-C-7:1_Staging Pile Area_2_Focused	28.7
100-C-7:1_Staging Pile Area_3	99.1
100-C-7:1_Staging Pile Area_4	46.5
100-C-7_Overburden_Focused_15	159.5
100-C-7_Overburden_Focused_18	54.9
100-C-7_Overburden_Focused_2	69.3
100-C-7_Overburden_Focused_27	20.9
100-C-7_Overburden_Focused_31	163.6
100-C-7_Overburden_Focused_45	18.7
100-C-7_Overburden_Focused_47	31.8
100-C-7_Shallow_1	35.7
100-C-7_Shallow_2	35.9
100-C-7_Staging pile area	45.2
100-C-9:1_Deep_Focused	2
100-C-9:1_Overburden_Focused	44.6
100-C-9:1_Shallow_1	112
100-C-9:1_Shallow_2	26.1
100-C-9:1_Shallow_Focused	348.7
100-C-9:2_Overburden_Focused	16.6
100-C-9:2_Shallow	11.7
100-C-9:2_Shallow_Focused	14.8
100-C-9:3_Deep_Focused	2
116-B-1_Deep	20
116-B-1_Shallow	10.8
116-B-10_Shallow	8.4
116-B-11_Deep	85.7
116-B-11_Shallow	6.8
116-B-12_Deep	15.2
116-B-12_Shallow	15.9
116-B-13_Shallow	24.6
116-B-14_Deep	3.6
116-B-14_Shallow	3.4
116-B-15_Shallow_Focused	17.9
116-B-2_Deep	14.9
116-B-2_Shallow	7.7
116-B-3_Deep	2.2
116-B-3_Shallow	6.5
116-B-4_Deep	38.9
116-B-4_Shallow	10
116-B-5_Deep_Focused	18.5



**Table 4-4. Waste Site Dimensions Parallel to General Groundwater Flow for the 100-BC Source Operable Units**

<b>Waste Site/Decision Unit</b>	<b>Width in Prominent GW Flow Direction (meters)</b>
116-B-5_Overburden_Focused	4.8
116-B-5_Shallow_Focused	37.6
116-B-6A_Deep	11
116-B-6A_Shallow	7.9
116-B-6B_Shallow	8.6
116-B-7, 132-B-6, 132-C-2_Deep	12.7
116-B-7, 132-B-6, 132-C-2_Shallow	20.9
116-B-9_Shallow	7.1
116-C-1_Deep_Focused	57.5
116-C-1_Deep	57.5
116-C-1_Overburden	23
116-C-1_Shallow	12.3
116-C-2A_Deep	14.2
116-C-2A_Overburden	23.6
116-C-2A_Shallow	9.8
116-C-3_Overburden_Focused	33.4
116-C-3_Shallow	5
116-C-3_Shallow_Focused	4.6
116-C-3_Staging pile area_Focused	35.8
116-C-5_Deep	93.1
116-C-5_Overburden	20.2
116-C-5_Shallow	10.4
116-C-6_Shallow_Focused	2.4
118-B-1_Overburden_1	2.6
118-B-1_Overburden_8	101.9
118-B-1_Overburden_9	32.7
118-B-1_Shallow_1	37.4
118-B-1_Shallow_2	6.1
118-B-1_Shallow_3	9.8
118-B-1_Shallow_4	17.2
118-B-1_Shallow_5	33.1
118-B-1_Shallow_6	8.6
118-B-1_Shallow_7	55
118-B-1_Shallow_Focused	250.9
118-B-1_Staging pile area	103.6
118-B-1_Staging pile area_Focused	2.9
118-B-10_Shallow	8.6
118-B-10_Shallow_Focused	2.1
118-B-10_Staging pile area	8.3
118-B-3_Overburden_2	40.2
118-B-3_Overburden_4	76.8
118-B-3_Shallow	27.8

**Table 4-4. Waste Site Dimensions Parallel to General Groundwater Flow for the 100-BC Source Operable Units**

<b>Waste Site/Decision Unit</b>	<b>Width in Prominent GW Flow Direction (meters)</b>
118-B-3_Shallow_Focused	63.2
118-B-3_Staging pile area	47.5
118-B-4_Shallow	24.2
118-B-4_Staging pile area	23.5
118-B-5_Shallow	22.5
118-B-5_Shallow_Focused	2.3
118-B-5_Staging pile area	27.1
118-B-6_Deep	6.2
118-B-6_Overburden	23.6
118-B-6_Shallow	17
118-B-6_Staging pile area	21.8
118-B-7_Shallow_Focused	0.2
118-B-9_Shallow_Focused	4.2
118-C-1_Overburden	49.7
118-C-1_Shallow_1	29.6
118-C-1_Shallow_2	17.1
118-C-1_Shallow_3	41.6
118-C-1_Shallow_4	32.4
118-C-1_Shallow_Focused	84.2
118-C-1_Staging pile area	64.5
118-C-2_Shallow	9.8
118-C-2_Staging pile area	8
118-C-3:2_Deep_Focused	4.3
118-C-3:3_Shallow_Focused	60.3
118-C-4_Shallow	5.2
120-B-1_Shallow_Focused	10.6
126-B-3_Shallow	87.4
126-B-3_Staging pile area_2	84.6
126-B-3_Staging pile area_3	67.8
126-B-3_Staging pile area_Focused	2
128-B-2_Shallow	95
128-B-3_Shallow_1	15.4
128-B-3_Shallow_2	45.7
128-B-3_Shallow_3	39.8
128-B-3_Staging pile area	56.2
128-B-3_Staging pile area_Focused	4.3
128-C-1_Shallow	45.4
128-C-1_Shallow_Focused	37
1607-B1_Shallow_Focused	6.3
1607-B10_Shallow	14.6
1607-B11_Shallow	10.2
1607-B2:1_Overburden_Focused	10.6

**Table 4-4. Waste Site Dimensions Parallel to General Groundwater Flow for the  
100-BC Source Operable Units**

<b>Waste Site/Decision Unit</b>	<b>Width in Prominent GW Flow Direction (meters)</b>
1607-B2:1_Shallow	35.7
1607-B2:2_Overburden_Focused	129.6
1607-B2:2_Shallow	240.1
1607-B7_Shallow	12.3
1607-B8_Shallow	14.3
1607-B9_Shallow	28
600-232_Shallow	147.8
600-233_Shallow_Focused	2.1



Table 4-6. 100-BTC Source Operable Unit Exposure Point Concentration Summary

Waste Site Detection Unit	Analyte Group	Analyte	CAS No.	Total Samples	Total Detections	Total Non-Detections	Frequency of Detections	Units	Maximum Detected Value	Maximum Detection Limit	Minimum Detected Result	Minimum Detection Limit	Coefficient of Variation	Exposure Point Concentration	Exposure Point Concentration Basis	Comments
126-B-3_Staging pile area_2	non-Rad	Dibenzofuran	132-64-9	10	8	7	30	µg/kg	530	940	27	60	0.38	60	95% KM (Percentile Bootstrap) UCL	Warning: Recommended UCL exceeds the maximum observation Note: DU/2 is not a recommended method. Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
126-B-3_Staging pile area_2	non-Rad	Di-n-butylphthalate	84-74-2	10	9	1	80	µg/kg	670	670	21	48	0.25	86	95% KM (t) UCL	Warning: There are only 9 Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3_Staging pile area_2	non-Rad	Fluoranthene	208-98-0	10	4	6	40	µg/kg	330	340	40	284	0.87	192	95% KM (Percentile Bootstrap) UCL	Warning: There are only 4 Distinct Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3_Staging pile area_2	non-Rad	Fluorene	86-73-7	10	1	9	10	µg/kg	330	670	21	21	0	21	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Fluorene was not processed!
126-B-3_Staging pile area_2	non-Rad	Hexavalent Chromium	18540-28-8	7	7	0	100	µg/kg	—	—	209	483	0.28	536	95% Student's-t UCL	Warning: There are only 7 Values in this data Note: It should be noted that even though bootstrap methods may be performed on this data set, the resulting calculations may not be reliable enough to draw conclusions
126-B-3_Staging pile area_2	non-Rad	Indeno(1,2,3-cd)pyrene	193-89-5	10	1	9	10	µg/kg	330	670	42	42	0	42	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Indeno(1,2,3-cd)pyrene was not processed!
126-B-3_Staging pile area_2	non-Rad	Lead	7439-92-1	10	10	0	100	µg/kg	—	—	2,600	5,100	0.28	5,075	95% Student's-t UCL	Warning: There are only 3 Distinct Detected Values in this data set The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods. Those methods will return a 'N/A' value on your output display!
126-B-3_Staging pile area_2	non-Rad	Manganese	7439-96-5	10	10	0	100	µg/kg	—	—	229,000	358,000	0.15	310,472	95% Student's-t UCL	
126-B-3_Staging pile area_2	non-Rad	Mercury	7439-97-6	10	3	7	30	µg/kg	13	17	16	30	0.33	30	95% KM (Percentile Bootstrap) UCL	
126-B-3_Staging pile area_2	non-Rad	Molybdenum	7439-98-7	10	1	8	30	µg/kg	818	1,200	817	670	0.044	947	95% KM (t) UCL	Warning: Data set has only 2 Distinct Detected Values. This may not be adequate enough to compute meaningful and reliable test statistics and estimates. The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).
126-B-3_Staging pile area_2	non-Rad	Naphthalene	91-20-5	10	4	6	40	µg/kg	330	340	16	137	0.90	108	95% KM (t) UCL	Warning: There are only 4 Distinct Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3_Staging pile area_2	non-Rad	Nickel	7440-02-0	10	10	0	100	µg/kg	—	—	8,300	16,000	0.22	11,267	95% Approximate Gamma UCL	Warning: There are only 4 Distinct Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3_Staging pile area_2	non-Rad	Pyrene	129-00-0	10	4	6	40	µg/kg	330	340	36	238	0.92	217	95% KM (t) UCL	
126-B-3_Staging pile area_2	non-Rad	Silver	7440-22-4	10	1	9	10	µg/kg	459	466	457	457	0	457	Maximum Detect	
126-B-3_Staging pile area_2	non-Rad	Vanadium	7440-62-2	10	10	0	100	µg/kg	—	—	24,500	48,900	0.24	38,745	95% Student's-t UCL	Warning: There are only 5 Distinct Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3_Staging pile area_2	non-Rad	Zinc	7440-68-6	10	10	0	100	µg/kg	—	—	28,300	46,600	0.14	39,757	95% Student's-t UCL	
126-B-3_Staging pile area_3	non-Rad	Hexavalent Chromium	18540-28-8	12	5	6	43.45	µg/kg	200	220	220	490	0.34	385	95% KM (Percentile Bootstrap) UCL	
126-B-3_Staging pile area_Focused	non-Rad	2-Methylnaphthalene	91-57-4	1	1	0	100	µg/kg	—	—	76	76	0	76	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-8	1	1	0	100	µg/kg	—	—	1.6	1.6	0	1.6	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Aluminum	7429-90-5	1	1	0	100	µg/kg	—	—	1.01E+07	1.01E+07	0	1.01E+07	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Arsenic	7440-88-2	1	1	0	100	µg/kg	—	—	5,800	5,800	0	5,800	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Barium	7440-39-3	1	1	0	100	µg/kg	—	—	96,800	96,800	0	96,800	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	1	1	0	100	µg/kg	—	—	980	980	0	980	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-HCH)	819-85-7	1	1	0	100	µg/kg	—	—	2.4	2.4	0	2.4	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	217-81-7	1	1	0	100	µg/kg	—	—	92	92	0	92	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Boron	7440-42-8	1	1	0	100	µg/kg	—	—	8,300	8,300	0	8,300	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Cadmium	7440-43-9	1	1	0	100	µg/kg	—	—	360	360	0	360	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration
126-B-3_Staging pile area_Focused	non-Rad	Chromium	7440-47-5	1	1	0	100	µg/kg	—	—	13,800	13,800	0	13,800	Maximum Detect	Focused Sampling Design: EPC defaults to Minimum Concentration

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Table 4-6. 105-BIC Source Operable Unit Exposure Point Concentration Summary

Waste Site Division Unit	Analyte Group	Analyte	CAS No.	Total Samples	Total Detects	Total Non-Detects	Frequency of Detection	Units	Minimum Detected Value	Maximum Detected Value	Minimum Detected Result	Maximum Detected Result	Coefficient of Variation	Exposure Point Concentration	Exposure Point Concentration Note	Comment
126-B-3 Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	1	1	0	100	µg/kg	—	—	12,900	12,900	0	12,900	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Copper	7440-50-8	1	1	0	100	µg/kg	—	—	46,000	46,000	0	46,000	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Di-n-butylphthalate	84-74-2	1	1	0	100	µg/kg	—	—	25	25	0	25	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Iron	7439-89-6	1	1	0	100	µg/kg	—	—	2.75E+07	2.75E+07	0	2.75E+07	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Lead	7439-92-1	1	1	0	100	µg/kg	—	—	18,600	18,600	0	18,600	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Manganese	7439-96-5	1	1	0	100	µg/kg	—	—	467,000	467,000	0	467,000	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Mercury	7439-97-6	1	1	0	100	µg/kg	—	—	90	90	0	90	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Naphthalene	91-20-3	1	1	0	100	µg/kg	—	—	44	44	0	44	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Nickel	7440-02-0	1	1	0	100	µg/kg	—	—	19,300	19,300	0	19,300	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Pyrene	129-00-0	1	1	0	100	µg/kg	—	—	22	22	0	22	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Vanadium	7440-42-2	1	1	0	100	µg/kg	—	—	57,100	57,100	0	57,100	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area_Focused	non-Rad	Zinc	7440-66-4	1	1	0	100	µg/kg	—	—	220,000	220,000	0	220,000	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
126-B-3 Staging pile area	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	10	8	2	80	µg/kg	1.3	1.5	2.0	26	0.89	12	95% KM (BCA) UCL	Warning: There are only 8 Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3 Staging pile area	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	10	2	8	20	µg/kg	1.3	1.5	8.7	15	0.38	11	95% KM (Q) UCL	Warning: Data set has only 2 Distinct Detected Values. This may not be adequate enough to compute meaningful and reliable test statistics and estimates. The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).
126-B-3 Staging pile area	non-Rad	Acetone	67-64-1	10	1	9	10	µg/kg	10	10	13	13	0	13	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Acetone was not processed!
126-B-3 Staging pile area	non-Rad	Aldrin	309-00-2	10	1	9	10	µg/kg	1.3	1.3	0.37	0.37	0	0.37	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Aldrin was not processed!
126-B-3 Staging pile area	non-Rad	Aluminum	7429-90-5	10	10	0	100	µg/kg	—	—	6.12E+06	7.98E+06	0.069	7.98E+06	95% Student's-t UCL	Warning: There are only 8 Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3 Staging pile area	non-Rad	Aroclor-1254	11097-69-1	10	8	2	80	µg/kg	13	13	15	260	0.67	152	95% KM (Percentile Bootstrap) UCL	Warning: There are only 8 Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3 Staging pile area	non-Rad	Aroclor-1260	11096-82-5	10	8	2	80	µg/kg	13	13	4.4	55	0.72	51	95% KM (Q) UCL	Warning: There are only 8 Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3 Staging pile area	non-Rad	Arsenic	7440-38-2	10	10	0	100	µg/kg	—	—	2,500	3,600	0.14	3,212	95% Approximate Gamma UCL	
126-B-3 Staging pile area	non-Rad	Barium	7440-39-3	10	10	0	100	µg/kg	—	—	84,100	177,000	0.28	132,213	95% Student's-t UCL	
126-B-3 Staging pile area	non-Rad	Benz(a)anthracene	56-55-3	10	3	7	30	µg/kg	330	340	23	43	0.30	43	Maximum Detect	Recommended UCL Exceeds Maximum Concentration: EPC defaulting to Maximum Concentration since 97.5% and 99% Chebyshev (Mean, SD) UCLs were not calculated.
126-B-3 Staging pile area	non-Rad	Benz(a)pyrene	50-32-8	10	4	6	40	µg/kg	330	340	24	41	0.24	39	95% KM (Q) UCL	Warning: There are only 4 Distinct Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3 Staging pile area	non-Rad	Benz(b)fluoranthene	205-99-3	10	2	8	30	µg/kg	330	340	28	41	0.27	41	95% KM (N Bootstrap) UCL	Warning: Recommended UCL exceeds the maximum observation Note: Df/2 is not a recommended method. Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
126-B-3 Staging pile area	non-Rad	Benz(k)fluoranthene	207-08-9	10	2	8	20	µg/kg	330	340	26	38	0.27	38	95% KM (N Bootstrap) UCL	Warning: Recommended UCL exceeds the maximum observation Note: Df/2 is not a recommended method. Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
126-B-3 Staging pile area	non-Rad	Beryllium	7440-41-7	10	10	0	100	µg/kg	—	—	360	460	0.677	411	95% Student's-t UCL	
126-B-3 Staging pile area	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	10	9	1	90	µg/kg	660	660	24	390	0.83	152	95% KM (Chebyshev) UCL	Warning: There are only 9 Detected Values in this data Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
126-B-3 Staging pile area	non-Rad	Boron	7440-42-8	10	10	0	100	µg/kg	—	—	740	11,300	0.85	6,058	95% Student's-t UCL	
126-B-3 Staging pile area	non-Rad	Chlordane	57-74-9	10	1	9	10	µg/kg	1.3	1.3	0.83	0.83	0	0.83	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Chlordane was not processed!



## ECF-100BC5-11-0082, REV. 1

Table 4-5. 100-B/C Source Operable Unit Exposure Point Concentration Summary

Waste Site Section Unit	Analyte Group	Analyte	CAD No.	Total Samples	Total Subsets	Total Non-Detects	Frequency of Detection	Units	Maximum Detection Limit	Maximum Detection Limit	Minimum Detected Result	Maximum Detected Result	Coefficient of Variation	Exposure Point Concentration	Exposure Point Concentration Result	Comment
128-B-3 Staging pile area	non-Rad	Chromium	7440-47-3	10	10	0	100	µg/kg	—	—	10,300	18,200	0.18	15,057	95% Student's-t UCL	Warning: There are only 4 Distinct Detected Values in this data set. It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
128-B-3 Staging pile area	non-Rad	Chrysene	218-01-9	10	4	6	40	µg/kg	330	340	33	60	0.25	58	95% KM (t) UCL	
128-B-3 Staging pile area	non-Rad	Cobalt	7440-48-4	10	10	0	100	µg/kg	—	—	7,300	8,500	0.054	8,002	95% Student's-t UCL	
128-B-3 Staging pile area	non-Rad	Copper	7440-50-8	10	10	0	100	µg/kg	—	—	13,200	30,500	0.88	22,830	95% Student's-t UCL	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Dibenz(a,h)anthracene was not processed!
128-B-3 Staging pile area	non-Rad	Dibenz(a,h)anthracene	53-70-3	10	1	9	10	µg/kg	330	340	38	18	0	18	Maximum Detect	
128-B-3 Staging pile area	non-Rad	Dieldrin	60-57-1	10	4	6	40	µg/kg	1.5	1.5	1.4	12	0.84	6.4	95% KM (Percentile Bootstrap) UCL	
128-B-3 Staging pile area	non-Rad	Di-n-butylphthalate	94-74-2	10	5	5	50	µg/kg	880	840	22	36	0.17	38	95% KM (t) UCL	Warning: There are only 5 Detected Values in this data set. It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
128-B-3 Staging pile area	non-Rad	Fluoranthene	208-44-0	10	5	7	30	µg/kg	330	840	17	54	0.52	54	95% KM (Percentile Bootstrap) UCL	
128-B-3 Staging pile area	non-Rad	Hexavalent Chromium	18540-28-9	10	7	3	70	µg/kg	200	200	220	850	0.15	289	95% KM (Percentile Bootstrap) UCL	
128-B-3 Staging pile area	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	10	2	8	20	µg/kg	330	340	33	36	0.030	36	Maximum Detect	Warning: There are only 7 Detected Values in this data set. It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
128-B-3 Staging pile area	non-Rad	Iron	7439-89-6	10	10	0	100	µg/kg	—	—	1,69E+07	2,02E+07	0.057	1,88E+07	95% Student's-t UCL	
128-B-3 Staging pile area	non-Rad	Lead	7439-92-1	10	10	0	100	µg/kg	—	—	5,700	33,000	0.68	17,580	95% Approximate Gamma UCL	
128-B-3 Staging pile area	non-Rad	Manganese	7439-96-5	10	10	0	100	µg/kg	—	—	362,000	410,000	0.039	390,312	95% Student's-t UCL	Warning: There are only 8 Detected Values in this data set. It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions
128-B-3 Staging pile area	non-Rad	Mercury	7439-97-4	10	8	2	80	µg/kg	10	20	20	460	1.0	368	95% KM (Chebyshev) UCL	
128-B-3 Staging pile area	non-Rad	Methoxychlor	72-43-5	10	3	7	30	µg/kg	1.3	1.3	2.3	4.5	0.30	4.3	95% KM (Percentile Bootstrap) UCL	
128-B-3 Staging pile area	non-Rad	Methylene chloride	75-09-2	10	10	0	100	µg/kg	—	—	15	22	0.13	18	95% Student's-t UCL	Warning: There are only 3 Distinct Detected Values in this data set. The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods. These methods will return a 'NA' value on your output display!
128-B-3 Staging pile area	non-Rad	Nickel	7440-02-0	10	10	0	100	µg/kg	—	—	10,700	17,200	0.16	13,537	95% Approximate Gamma UCL	
128-B-3 Staging pile area	non-Rad	Pyrene	129-00-0	10	4	6	40	µg/kg	330	340	21	75	0.60	66	95% KM (t) UCL	
128-B-3 Staging pile area	non-Rad	Toluene	108-88-3	10	5	5	50	µg/kg	5.0	5.0	1.0	1.0	0	1.0	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Toluene was not processed!
128-B-3 Staging pile area	non-Rad	Total petroleum hydrocarbons	TPH	10	2	8	30	µg/kg	133,000	133,000	154,000	178,000	0.11	178,000	95% KM (t) Bootstrap UCL	
128-B-3 Staging pile area	non-Rad	Vanadium	7440-62-2	10	10	0	100	µg/kg	—	—	34,200	40,800	0.063	38,623	95% Student's-t UCL	
128-B-3 Staging pile area	non-Rad	Xylenes (total)	1330-20-7	10	2	8	30	µg/kg	5.0	5.0	1.0	1.0	0	1.0	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Xylenes (total) was not processed!
128-B-3 Staging pile area	non-Rad	Zinc	7440-66-6	10	10	0	100	µg/kg	—	—	40,100	133,000	0.46	79,106	95% H-UCL	
128-B-3 Staging pile area	non-Rad	4,4'-DDX (Dichlorodiphenyldichloroethylene)	72-55-0	1	1	0	100	µg/kg	—	—	3.6	3.6	0	3.6	Maximum Detect	
128-B-3 Staging pile area	non-Rad	Aluminum	7429-90-5	2	2	0	100	µg/kg	—	—	7,54E+06	7,68E+06	0.052	7,68E+06	Maximum Detect	Warning: Data set has only 2 Distinct Detected Values. This may not be adequate enough to compute meaningful and reliable test statistics and estimates. The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).
128-B-3 Staging pile area	non-Rad	Aroclor-1254	11097-09-1	1	1	0	100	µg/kg	—	—	120	120	0	120	Maximum Detect	
128-B-3 Staging pile area	non-Rad	Aroclor-1260	11098-82-5	1	1	0	100	µg/kg	—	—	19	19	0	19	Maximum Detect	
128-B-3 Staging pile area	non-Rad	Arsenic	7440-09-2	2	2	0	100	µg/kg	—	—	3,500	3,800	0.058	3,800	Maximum Detect	Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). The data set for variable Xylenes (total) was not processed!
128-B-3 Staging pile area	non-Rad	Barium	7440-09-9	2	2	0	100	µg/kg	—	—	178,000	178,000	0.33	178,000	Maximum Detect	

Table 4-6. 106-BIC Source Operable Unit Exposure Point Concentration Summary

Table 4-8. 108-B/C Source Operable Unit Exposure Point Concentration Summary																
Waste Site Eviction Unit	Analyte Group	Analyte	CAS No.	Total Samples	Total Detects	Total Non-Detects	Frequency of Detection	Units	Maximum Detected Limit	Minimum Detected Limit	Minimum Detected Result	Coefficient of Variation	Exposure Point Concentration	Exposure Point Concentration Ratio	Comment	
128-B-3 Staging pile area_Focused	non-Rad	Beryllium	7440-41-7	2	2	0	100	µg/kg	—	—	710	0.11	830	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration	
128-B-3 Staging pile area_Focused	non-Rad	Beta-1,2,3,4,5,6-Hexachlorocyclohexane (Beta-HCH)	319-85-7	1	1	0	100	µg/kg	—	—	0.54	0.54	0	0.54	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	1	1	0	100	µg/kg	—	—	29	29	0	29	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Boron	7440-42-8	2	2	0	100	µg/kg	—	—	8,000	17,500	0.53	17,500	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Chromium	7440-47-3	2	2	0	100	µg/kg	—	—	12,200	12,500	0.017	12,500	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Cobalt	7440-48-4	2	2	0	100	µg/kg	—	—	7,500	8,000	0.065	8,000	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Copper	7440-50-8	2	2	0	100	µg/kg	—	—	15,800	17,900	0.088	17,900	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Hexavalent Chromium	18540-29-8	1	1	0	100	µg/kg	—	—	1,100	1,100	0	1,100	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Iron	7439-89-6	2	2	0	100	µg/kg	—	—	1.78E+07	1.85E+07	0.027	1.85E+07	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Lead	7439-92-1	2	2	0	100	µg/kg	—	—	10,600	14,500	0.22	14,500	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Manganese	7439-96-5	2	2	0	100	µg/kg	—	—	372,000	390,000	0.033	390,000	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Mercury	7439-97-4	2	2	0	100	µg/kg	—	—	90	120	0.20	120	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Methylene chloride	75-09-2	1	1	0	100	µg/kg	—	—	11	11	0	11	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Nickel	7440-02-0	2	2	0	100	µg/kg	—	—	11,100	12,200	0.087	12,200	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Silver	7440-22-4	2	1	1	50	µg/kg	200	200	250	250	0	250	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Vanadium	7440-62-2	2	2	0	100	µg/kg	—	—	37,000	37,200	0.0088	37,200	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration
128-B-3 Staging pile area_Focused	non-Rad	Zinc	7440-66-6	2	2	0	100	µg/kg	—	—	50,200	59,500	0.12	59,500	Maximum Detect	Focused Sampling Design: EPC defaults to Maximum Concentration



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	45	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-1_Shallow_1	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	48	63,829	59	1,089	No
100-B-1_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	24	88,471	59	1,510	No
100-B-1_Shallow_2	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g}/\text{kg}$	1.5	836,540	80	10,418	No
100-B-1_Shallow_2	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	1.3	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	2.9	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Aldrin	309-00-2	$\mu\text{g}/\text{kg}$	1.1	9,878	80	123	No
100-B-1_Shallow_2	non-Rad	Alpha-BHC	319-84-6	$\mu\text{g}/\text{kg}$	1.0	1.7	80	0.021	Yes
100-B-1_Shallow_2	non-Rad	Alpha-Chlordane	5103-71-9	$\mu\text{g}/\text{kg}$	1.3	1.42E+06	80	17,697	No
100-B-1_Shallow_2	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	92	4.27E+07	80	531,455	No
100-B-1_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	33	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	120	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	30	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	55	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	65	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	6.8	3.8	80	0.047	Yes
100-B-1_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	33	537	80	6.7	Yes
100-B-1_Shallow_2	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	1.3	1.42E+06	80	17,697	No
100-B-1_Shallow_2	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	150	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	22	3,353	80	42	No
100-B-1_Shallow_2	non-Rad	Dieldrin	60-57-1	$\mu\text{g}/\text{kg}$	1.3	166	80	2.1	No
100-B-1_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	35	88,471	80	1,102	No
100-B-1_Shallow_2	non-Rad	Endosulfan I	959-98-8	$\mu\text{g}/\text{kg}$	1.3	7,192	80	90	No
100-B-1_Shallow_2	non-Rad	Endosulfan II	33213-65-9	$\mu\text{g}/\text{kg}$	1.5	7,192	80	90	No
100-B-1_Shallow_2	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	1.5	1,219	80	15	No
100-B-1_Shallow_2	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	700	3.89E+08	80	4.84E+06	No
100-B-1_Shallow_2	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	35	97,154	80	1,210	No
100-B-1_Shallow_2	non-Rad	Gamma-BHC (Lindane)	58-89-9	$\mu\text{g}/\text{kg}$	1.2	3.8	80	0.047	Yes
100-B-1_Shallow_2	non-Rad	Heptachlor	76-44-8	$\mu\text{g}/\text{kg}$	5.5	8.7	80	0.11	Yes
100-B-1_Shallow_2	non-Rad	Heptachlor epoxide	1024-57-3	$\mu\text{g}/\text{kg}$	1.4	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	5.6	— <sup>c</sup>	80	— <sup>c</sup>	—
100-B-1_Shallow_2	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	750	3.89E+08	80	4.84E+06	No
100-B-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,400	10,000	38	265	Yes
100-B-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	92,800	3.89E+08	38	1.03E+07	No
100-B-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	103	— <sup>c</sup>	38	— <sup>c</sup>	—
100-B-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	72	1,256	38	33	Yes
100-B-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,900	— <sup>c</sup>	38	— <sup>c</sup>	—
100-B-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,800	— <sup>c</sup>	38	— <sup>c</sup>	—
100-B-1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	9,520	1.00E+06 <sup>d</sup>	38	1.00E+06 <sup>d</sup>	No
100-B-1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.13	— <sup>c</sup>	38	— <sup>c</sup>	—
100-B-11_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.44E+06	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-11_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,400	1.19E+07	2.0	5.95E+06	No
100-B-11_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,900	10,000	2.0	5,000	No
100-B-11_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	74,400	3.89E+08	2.0	1.95E+08	No
100-B-11_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	82	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-11_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,700	348,488	2.0	174,244	No
100-B-11_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	224	1,256	2.0	628	No
100-B-11_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,600	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-11_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,100	9.52E+06	2.0	4.76E+06	No
100-B-11_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,500	7.69E+06	2.0	3.84E+06	No
100-B-11_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,46E+07	2.92E+08	2.0	1.46E+08	No
100-B-11_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	16,600	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-11_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	318,000	3.89E+08	2.0	1.95E+08	No
100-B-11_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	18	1.34E+07	2.0	6.72E+06	No
100-B-11_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	551	563,885	2.0	281,942	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-11_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,200	3.89E+08	2.0	1.95E+08	No
100-B-11_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	55,000	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-11_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	65,000	3.89E+08	2.0	1.95E+08	No
100-B-11_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	0.25	2,121	2.0	1,060	No
100-B-14:1_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.23	— <sup>c</sup>	18	— <sup>c</sup>	—
100-B-14:1_Deep_Focused	Rad	Carbon-14	14762-75-5	$\text{pCi}/\text{g}$	275	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	336	6,000 <sup>d</sup>	45	6,000 <sup>d</sup>	No
100-B-14:1_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.061	— <sup>c</sup>	45	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	34	2,896	59	49	No
100-B-14:2_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5,93E+06	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,350	10,000	59	169	Yes
100-B-14:2_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	256,706	3.89E+08	59	6.57E+06	No
100-B-14:2_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	23	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	378	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	0.60	3.8	59	0.064	Yes
100-B-14:2_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,700	348,488	59	5,887	No
100-B-14:2_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	135	1,256	59	21	Yes
100-B-14:2_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,821	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,306	9.52E+06	59	160,781	No
100-B-14:2_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,751	7.69E+06	59	129,892	No
100-B-14:2_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	277	6,000 <sup>d</sup>	59	6,000 <sup>d</sup>	No
100-B-14:2_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,08E+07	2.92E+08	59	4.94E+06	Yes
100-B-14:2_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,727	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	7,236	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	348,187	3.89E+08	59	6.57E+06	No
100-B-14:2_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	36	1.34E+07	59	226,873	No
100-B-14:2_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	685	563,885	59	9,525	No
100-B-14:2_Shallow_1	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	24	6,798	59	115	No
100-B-14:2_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,448	3.89E+08	59	6.57E+06	No
100-B-14:2_Shallow_1	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	59,947	3.89E+08	59	6.57E+06	No
100-B-14:2_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	48,661	— <sup>c</sup>	59	— <sup>c</sup>	—
100-B-14:2_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	44,656	3.89E+08	59	6.57E+06	No
100-B-14:2_Shallow_1	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	0.31	2,121	59	36	No
100-B-14:2_Shallow_2	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g}/\text{kg}$	2.1	836,540	12	68,569	No
100-B-14:2_Shallow_2	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	7.6	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethylene)	50-29-3	$\mu\text{g}/\text{kg}$	6.7	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Acenaphthene	83-32-9	$\mu\text{g}/\text{kg}$	197	84,728	12	6,945	No
100-B-14:2_Shallow_2	non-Rad	Aldrin	309-00-2	$\mu\text{g}/\text{kg}$	2.4	9,878	12	810	No
100-B-14:2_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.99E+06	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	345	4.27E+07	12	3.50E+06	No
100-B-14:2_Shallow_2	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	640	1.19E+07	12	975,232	No
100-B-14:2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	81	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	5.3	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,093	10,000	12	820	Yes
100-B-14:2_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	74,830	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	703	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	655	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	534	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	564	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	508	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	27	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,600	348,488	12	28,565	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-14:2_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	202	1,256	12	103	Yes
100-B-14:2_Shallow_2	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	214	537	12	44	Yes
100-B-14:2_Shallow_2	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	1.2	1.42E+06	12	116,479	No
100-B-14:2_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,992	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	830	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,290	9.52E+06	12	780,185	No
100-B-14:2_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	23,864	7.69E+06	12	630,297	No
100-B-14:2_Shallow_2	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	318	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	82	3,353	12	275	No
100-B-14:2_Shallow_2	non-Rad	Dieldrin	60-57-1	$\mu\text{g}/\text{kg}$	3.6	166	12	14	No
100-B-14:2_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	28	88,471	12	7,252	No
100-B-14:2_Shallow_2	non-Rad	Di-n-octylphthalate	117-84-0	$\mu\text{g}/\text{kg}$	95	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	1,336	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	130	97,154	12	7,963	No
100-B-14:2_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	418	6,000 <sup>d</sup>	12	6,000 <sup>d</sup>	No
100-B-14:2_Shallow_2	non-Rad	Indeno[1,2,3-cd]pyrene	193-39-5	$\mu\text{g}/\text{kg}$	423	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,09E+07	2.92E+08	12	2.40E+07	No
100-B-14:2_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	35,014	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	6,800	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	341,978	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	118	1.34E+07	12	1.10E+06	No
100-B-14:2_Shallow_2	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	794	563,885	12	46,220	No
100-B-14:2_Shallow_2	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	55	6,798	12	557	No
100-B-14:2_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	15,473	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Pentachlorophenol	87-86-5	$\mu\text{g}/\text{kg}$	1,900	330	12	27	Yes
100-B-14:2_Shallow_2	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	1,289	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	35,581	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Tin	7440-31-5	$\mu\text{g}/\text{kg}$	1,100	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	46,320	— <sup>c</sup>	12	— <sup>c</sup>	—
100-B-14:2_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	85,443	3.89E+08	12	3.19E+07	No
100-B-14:2_Shallow_3	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.60E+06	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	8.9	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,983	10,000	19	518	Yes
100-B-14:2_Shallow_3	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	59,842	3.89E+08	19	2.02E+07	No
100-B-14:2_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	333	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	0.62	3.8	19	0.20	Yes
100-B-14:2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,511	348,488	19	18,056	No
100-B-14:2_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	155	1,256	19	65	Yes
100-B-14:2_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	7,841	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,889	9.52E+06	19	493,174	No
100-B-14:2_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,742	7.69E+06	19	398,426	No
100-B-14:2_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	21	88,471	19	4,584	No
100-B-14:2_Shallow_3	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	1.3	1,219	19	63	No
100-B-14:2_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	363	6,000 <sup>d</sup>	19	6,000 <sup>d</sup>	No
100-B-14:2_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.87E+07	2.92E+08	19	1.52E+07	Yes
100-B-14:2_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,871	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	7,759	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	335,398	3.89E+08	19	2.02E+07	No
100-B-14:2_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	28	1.34E+07	19	695,900	No
100-B-14:2_Shallow_3	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	49	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	522	563,885	19	29,217	No
100-B-14:2_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,050	3.89E+08	19	2.02E+07	No
100-B-14:2_Shallow_3	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	20	3.89E+08	19	2.02E+07	No
100-B-14:2_Shallow_3	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	34,255	3.89E+08	19	2.02E+07	No
100-B-14:2_Shallow_3	non-Rad	Tin	7440-31-5	$\mu\text{g}/\text{kg}$	1,351	— <sup>c</sup>	19	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-14:2_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	44,271	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	39,869	3.89E+08	19	2.02E+07	No
100-B-14:2_Shallow_3	Rad	Cesium-137	10045-97-3	$\text{pCl}/\text{g}$	0.077	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.35E+06	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,100	10,000	2.0	5,000	No
100-B-14:2_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	73,100	3.89E+08	2.0	1.95E+08	No
100-B-14:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	812	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	300	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,000	348,488	2.0	174,244	No
100-B-14:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	241	1,256	2.0	628	No
100-B-14:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,400	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,900	9.52E+06	2.0	4.76E+06	No
100-B-14:2_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,500	7.69E+06	2.0	3.84E+06	No
100-B-14:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	248	6,000 <sup>d</sup>	2.0	6,000 <sup>d</sup>	No
100-B-14:2_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,05E+07	2.92E+08	2.0	1.46E+08	No
100-B-14:2_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,900	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	6,400	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	347,000	3.89E+08	2.0	1.95E+08	No
100-B-14:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	44	1.34E+07	2.0	6.72E+06	No
100-B-14:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,500	3.89E+08	2.0	1.95E+08	No
100-B-14:2_Shallow_Focused	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	34,200	3.89E+08	2.0	1.95E+08	No
100-B-14:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	47,800	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	50,800	3.89E+08	2.0	1.95E+08	No
100-B-14:3_Deep_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.19E+06	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:3_Deep_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,400	10,000	2.0	5,000	No
100-B-14:3_Deep_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	59,800	3.89E+08	2.0	1.95E+08	No
100-B-14:3_Deep_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	311	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:3_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	46	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:3_Deep_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,400	348,488	2.0	174,244	No
100-B-14:3_Deep_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	5,600	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:3_Deep_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,900	9.52E+06	2.0	4.76E+06	No
100-B-14:3_Deep_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,100	7.69E+06	2.0	3.84E+06	No
100-B-14:3_Deep_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.55E+07	2.92E+08	2.0	1.46E+08	No
100-B-14:3_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	3,900	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:3_Deep_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	355,000	3.89E+08	2.0	1.95E+08	No
100-B-14:3_Deep_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	528	563,885	2.0	281,942	No
100-B-14:3_Deep_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	8,500	3.89E+08	2.0	1.95E+08	No
100-B-14:3_Deep_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	164	27,530	2.0	13,765	No
100-B-14:3_Deep_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	64,400	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-14:3_Deep_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	45,900	3.89E+08	2.0	1.95E+08	No
100-B-14:5_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.57E+06	— <sup>c</sup>	0.010	— <sup>c</sup>	—
100-B-14:5_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	310	1.19E+07	0.010	1.19E+09	No
100-B-14:5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,300	10,000	0.010	1.00E+06	No
100-B-14:5_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	82,100	3.89E+08	0.010	3.89E+10	No
100-B-14:5_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	360	— <sup>c</sup>	0.010	— <sup>c</sup>	—
100-B-14:5_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	4,400	348,488	0.010	3.48E+07	No
100-B-14:5_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	190	1,256	0.010	125,633	No
100-B-14:5_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	16,500	— <sup>c</sup>	0.010	— <sup>c</sup>	—
100-B-14:5_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,900	9.52E+06	0.010	9.52E+08	No
100-B-14:5_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,700	7.69E+06	0.010	7.69E+08	No
100-B-14:5_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.68E+07	2.92E+08	0.010	2.92E+10	No
100-B-14:5_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,300	— <sup>c</sup>	0.010	— <sup>c</sup>	—
100-B-14:5_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	395,000	3.89E+08	0.010	3.89E+10	No
100-B-14:5_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	560	563,885	0.010	5.64E+07	No
100-B-14:5_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,000	3.89E+08	0.010	3.89E+10	No
100-B-14:5_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	90	27,530	0.010	2.75E+06	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-14:5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	69,400	- <sup>c</sup>	0.010	- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	76,200	3.89E+08	0.010	3.89E+10	No
100-B-14:6_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	9.26E+06	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,800	10,000	11	917	Yes
100-B-14:6_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	364,000	3.89E+08	11	3.57E+07	No
100-B-14:6_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	470	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,800	348,488	11	31,971	No
100-B-14:6_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	250	1,256	11	115	Yes
100-B-14:6_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	49,100	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,600	9.52E+06	11	873,235	No
100-B-14:6_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	21,000	7.69E+06	11	705,470	No
100-B-14:6_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.67E+07	2.92E+08	11	2.68E+07	No
100-B-14:6_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,800	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	446,000	3.89E+08	11	3.57E+07	No
100-B-14:6_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	1,400	1.34E+07	11	1.23E+06	No
100-B-14:6_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	940	563,885	11	51,733	No
100-B-14:6_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	25,100	3.89E+08	11	3.57E+07	No
100-B-14:6_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	90	27,530	11	2,526	No
100-B-14:6_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,900	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	57,000	3.89E+08	11	3.57E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.14E+07	- <sup>c</sup>	5.7	- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	410	1.19E+07	5.7	2.09E+06	No
100-B-14:7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,200	10,000	5.7	1,754	Yes
100-B-14:7_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	128,000	3.89E+08	5.7	6.82E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	430	- <sup>c</sup>	5.7	- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,400	348,488	5.7	61,138	No
100-B-14:7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	500	1,256	5.7	220	Yes
100-B-14:7_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	25,400	- <sup>c</sup>	5.7	- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,600	9.52E+06	5.7	1.67E+06	No
100-B-14:7_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	21,300	7.69E+06	5.7	1.35E+06	No
100-B-14:7_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.52E+07	2.92E+08	5.7	5.13E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	12,100	- <sup>c</sup>	5.7	- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	408,000	3.89E+08	5.7	6.82E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	80	1.34E+07	5.7	2.36E+06	No
100-B-14:7_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	760	563,885	5.7	98,927	No
100-B-14:7_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	22,700	3.89E+08	5.7	6.82E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	52,500	- <sup>c</sup>	5.7	- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	79,400	3.89E+08	5.7	6.82E+07	No
100-B-16_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	24	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,300	10,000	11	893	Yes
100-B-16_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	226,000	3.89E+08	11	3.47E+07	No
100-B-16_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	26	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	21	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	61	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	46	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	100	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	360	1,256	11	112	Yes
100-B-16_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,400	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	110	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	37	88,471	11	7,899	No
100-B-16_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	150	3.89E+08	11	3.47E+07	No
100-B-16_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,700	- <sup>c</sup>	11	- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	30	1.34E+07	11	1.20E+06	No
100-B-16_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	120	3.89E+08	11	3.47E+07	No
100-B-16_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	1,500	27,530	11	2,458	No
100-B-18_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	$\mu\text{g}/\text{kg}$	170	84,728	20	4,301	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-18_Shallow_Focused	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	73	17,372	20	882	No
100-B-18_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.12E+07	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	580	4.27E+07	20	2.17E+06	No
100-B-18_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	9,300	1.19E+07	20	603,951	No
100-B-18_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	39	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	95	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,000	10,000	20	508	Yes
100-B-18_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	1.30E+06	3.89E+08	20	1.97E+07	No
100-B-18_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	250	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	300	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	240	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	100	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	640	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	34,200	348,488	20	17,690	Yes
100-B-18_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	13,200	1,256	20	64	Yes
100-B-18_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,300	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	270	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,200	9.52E+06	20	483,160	No
100-B-18_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	18,900	7.69E+06	20	390,336	No
100-B-18_Shallow_Focused	non-Rad	Dibenz(a,h)anthracene	53-70-3	$\mu\text{g}/\text{kg}$	30	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	300	3.89E+08	20	1.97E+07	No
100-B-18_Shallow_Focused	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	530	97,154	20	4,932	No
100-B-18_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	210	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.16E+07	2.92E+08	20	1.48E+07	Yes
100-B-18_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	25,300	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	356,000	3.89E+08	20	1.97E+07	No
100-B-18_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	2,200	1.34E+07	20	681,770	No
100-B-18_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	960	563,885	20	28,624	No
100-B-18_Shallow_Focused	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	440	6,798	20	345	Yes
100-B-18_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,100	3.89E+08	20	1.97E+07	No
100-B-18_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	510	3.89E+08	20	1.97E+07	No
100-B-18_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	730	9,013	20	458	Yes
100-B-18_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	222,000	1.00E+06 <sup>d</sup>	20	1.00E+06 <sup>d</sup>	No
100-B-18_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	46,500	— <sup>c</sup>	20	— <sup>c</sup>	—
100-B-18_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	77,600	3.89E+08	20	1.97E+07	No
100-B-19_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.90E+06	— <sup>c</sup>	64	— <sup>c</sup>	—
100-B-19_Shallow_1	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	970	1.19E+07	64	186,779	No
100-B-19_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,658	10,000	64	157	Yes
100-B-19_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	57,930	3.89E+08	64	6.11E+06	No
100-B-19_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	735	— <sup>c</sup>	64	— <sup>c</sup>	—
100-B-19_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,500	348,488	64	5,471	No
100-B-19_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	38,860	— <sup>c</sup>	64	— <sup>c</sup>	—
100-B-19_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,267	9.52E+06	64	149,423	No
100-B-19_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,878	7.69E+06	64	120,716	No
100-B-19_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	886	6,000 <sup>e</sup>	64	6,000 <sup>e</sup>	No
100-B-19_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.37E+07	2.92E+08	64	4.59E+06	Yes
100-B-19_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	25,097	— <sup>c</sup>	64	— <sup>c</sup>	—
100-B-19_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	341,162	3.89E+08	64	6.11E+06	No
100-B-19_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	60	1.34E+07	64	210,846	No
100-B-19_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,467	3.89E+08	64	6.11E+06	No
100-B-19_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	58,736	— <sup>c</sup>	64	— <sup>c</sup>	—
100-B-19_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	42,877	3.89E+08	64	6.11E+06	No
100-B-19_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8.93E+06	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-19_Shallow_2	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,194	1.19E+07	16	725,477	No
100-B-19_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,880	10,000	16	610	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-19_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	97,962	3.89E+08	16	2.37E+07	No
100-B-19_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	313	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-19_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,381	348,488	16	21,249	No
100-B-19_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	170	1,256	16	77	Yes
100-B-19_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	13,790	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-19_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,998	9.52E+06	16	580,382	No
100-B-19_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,093	7.69E+06	16	468,879	No
100-B-19_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	190	6,000 <sup>d</sup>	16	6,000 <sup>d</sup>	No
100-B-19_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.30E+07	2.92E+08	16	1.78E+07	Yes
100-B-19_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,415	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-19_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	414,775	3.89E+08	16	2.37E+07	No
100-B-19_Shallow_2	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	24	1.34E+07	16	818,955	No
100-B-19_Shallow_2	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	649	563,885	16	34,383	No
100-B-19_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,360	3.89E+08	16	2.37E+07	No
100-B-19_Shallow_2	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	1,280	9,013	16	550	Yes
100-B-19_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,696	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-19_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	47,802	3.89E+08	16	2.37E+07	No
100-B-19_Shallow_4	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.24E+06	— <sup>c</sup>	36	— <sup>c</sup>	—
100-B-19_Shallow_4	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,048	10,000	36	278	Yes
100-B-19_Shallow_4	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	65,972	3.89E+08	36	1.08E+07	No
100-B-19_Shallow_4	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	452	— <sup>c</sup>	36	— <sup>c</sup>	—
100-B-19_Shallow_4	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,400	348,488	36	9,680	No
100-B-19_Shallow_4	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	122	1,256	36	35	Yes
100-B-19_Shallow_4	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,506	— <sup>c</sup>	36	— <sup>c</sup>	—
100-B-19_Shallow_4	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,930	9.52E+06	36	264,396	No
100-B-19_Shallow_4	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,321	7.69E+06	36	213,601	No
100-B-19_Shallow_4	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	420	6,000 <sup>d</sup>	36	6,000 <sup>d</sup>	No
100-B-19_Shallow_4	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.97E+07	2.92E+08	36	8.12E+06	Yes
100-B-19_Shallow_4	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	9,612	— <sup>c</sup>	36	— <sup>c</sup>	—
100-B-19_Shallow_4	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	316,396	3.89E+08	36	1.08E+07	No
100-B-19_Shallow_4	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	15	1.34E+07	36	373,079	No
100-B-19_Shallow_4	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	359	563,885	36	15,663	No
100-B-19_Shallow_4	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,262	3.89E+08	36	1.08E+07	No
100-B-19_Shallow_4	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	44,697	— <sup>c</sup>	36	— <sup>c</sup>	—
100-B-19_Shallow_4	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	41,817	3.89E+08	36	1.08E+07	No
100-B-19_Shallow_5	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.69E+06	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-19_Shallow_5	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,076	10,000	25	397	Yes
100-B-19_Shallow_5	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	70,260	3.89E+08	25	1.54E+07	No
100-B-19_Shallow_5	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	818	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-19_Shallow_5	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,769	348,488	25	13,829	No
100-B-19_Shallow_5	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	322	1,256	25	50	Yes
100-B-19_Shallow_5	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,988	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-19_Shallow_5	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,504	9.52E+06	25	377,709	No
100-B-19_Shallow_5	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,154	7.69E+06	25	305,144	No
100-B-19_Shallow_5	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	236	6,000 <sup>d</sup>	25	6,000 <sup>d</sup>	No
100-B-19_Shallow_5	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.60E+07	2.92E+08	25	1.16E+07	Yes
100-B-19_Shallow_5	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,792	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-19_Shallow_5	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	388,836	3.89E+08	25	1.54E+07	No
100-B-19_Shallow_5	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	6,100	1.34E+07	25	532,971	No
100-B-19_Shallow_5	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	820	563,885	25	22,376	No
100-B-19_Shallow_5	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,222	3.89E+08	25	1.54E+07	No
100-B-19_Shallow_5	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	66,151	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-19_Shallow_5	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	48,358	3.89E+08	25	1.54E+07	No
100-B-19_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.02E+07	— <sup>c</sup>	219	— <sup>c</sup>	—
100-B-19_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,500	1.19E+07	219	54,328	No
100-B-19_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,100	10,000	219	46	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-19_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	173,000	3.89E+08	219	1.78E+06	No
100-B-19_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	1,200	— <sup>c</sup>	219	— <sup>c</sup>	—
100-B-19_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,500	348,488	219	1,591	Yes
100-B-19_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	370	1,256	219	5.7	Yes
100-B-19_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	17,600	— <sup>c</sup>	219	— <sup>c</sup>	—
100-B-19_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,000	9.52E+06	219	43,462	No
100-B-19_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	22,800	7.69E+06	219	35,112	No
100-B-19_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	330	6,000 <sup>d</sup>	219	6,000 <sup>d</sup>	No
100-B-19_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	3.96E+07	2.92E+08	219	1.34E+06	Yes
100-B-19_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	17,400	— <sup>c</sup>	219	— <sup>c</sup>	—
100-B-19_Shallow_Focused	non-Rad	Manganese	7439-95-5	$\mu\text{g}/\text{kg}$	376,000	3.89E+08	219	1.78E+06	No
100-B-19_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	17,100	1.34E+07	219	61,328	No
100-B-19_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,100	563,885	219	2,575	No
100-B-19_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,000	3.89E+08	219	1.78E+06	No
100-B-19_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	91,300	— <sup>c</sup>	219	— <sup>c</sup>	—
100-B-19_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	52,200	3.89E+08	219	1.78E+06	No
100-B-20_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.50E+06	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	8.5	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,800	10,000	3.2	3,125	No
100-B-20_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	72,700	3.89E+08	3.2	1.22E+08	No
100-B-20_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	29	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	32	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	320	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,700	348,488	3.2	108,903	No
100-B-20_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,100	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	31	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	11,200	9.52E+06	3.2	2.97E+06	No
100-B-20_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	43,300	7.69E+06	3.2	2.40E+06	No
100-B-20_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	153	88,471	3.2	27,647	No
100-B-20_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	43	3.89E+08	3.2	1.22E+08	No
100-B-20_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.17E+07	2.92E+08	3.2	9.14E+07	No
100-B-20_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	20,900	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Manganese	7439-95-5	$\mu\text{g}/\text{kg}$	354,000	3.89E+08	3.2	1.22E+08	No
100-B-20_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	327	1.34E+07	3.2	4.20E+06	No
100-B-20_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	599	563,885	3.2	176,214	No
100-B-20_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,800	3.89E+08	3.2	1.22E+08	No
100-B-20_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	40	3.89E+08	3.2	1.22E+08	No
100-B-20_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	440	9,013	3.2	2,817	No
100-B-20_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,900	— <sup>c</sup>	3.2	— <sup>c</sup>	—
100-B-20_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	326,000	3.89E+08	3.2	1.22E+08	No
100-B-21:2_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	9.07E+06	— <sup>c</sup>	33	— <sup>c</sup>	—
100-B-21:2_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,978	10,000	33	303	Yes
100-B-21:2_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	88,995	3.89E+08	33	1.18E+07	No
100-B-21:2_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	190	— <sup>c</sup>	33	— <sup>c</sup>	—
100-B-21:2_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,390	348,488	33	10,560	No
100-B-21:2_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	310	1,256	33	38	Yes
100-B-21:2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,640	— <sup>c</sup>	33	— <sup>c</sup>	—
100-B-21:2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,955	9.52E+06	33	288,432	No
100-B-21:2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,744	7.69E+06	33	233,019	No
100-B-21:2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	22	88,471	33	2,681	No
100-B-21:2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	275	6,000 <sup>d</sup>	33	6,000 <sup>d</sup>	No
100-B-21:2_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.37E+07	2.92E+08	33	8.86E+06	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-21:2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,454	— <sup>c</sup>	33	— <sup>c</sup>	—
100-B-21:2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	359,421	3.89E+08	33	1.18E+07	No
100-B-21:2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,390	563,885	33	17,087	No
100-B-21:2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	16,027	3.89E+08	33	1.18E+07	No
100-B-21:2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	21	3.89E+08	33	1.18E+07	No
100-B-21:2_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	390	27,530	33	834	No
100-B-21:2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	49,852	— <sup>c</sup>	33	— <sup>c</sup>	—
100-B-21:2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	43,836	3.89E+08	33	1.18E+07	No
100-B-21:2_Shallow	Rad	Cesium-137	10045-97-3	pCl/g	0.075	— <sup>c</sup>	33	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.91E+06	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	369	1.19E+07	9.2	1.29E+06	No
100-B-21:3_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,247	10,000	9.2	1,087	Yes
100-B-21:3_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	67,083	3.89E+08	9.2	4.23E+07	No
100-B-21:3_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	68	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	27	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	60	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	341	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,104	348,488	9.2	37,879	No
100-B-21:3_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	75	1,256	9.2	137	No
100-B-21:3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,795	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	86	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,788	9.52E+06	9.2	1.03E+06	No
100-B-21:3_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,573	7.69E+06	9.2	835,828	No
100-B-21:3_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	120	3.89E+08	9.2	4.23E+07	No
100-B-21:3_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,51E+07	2.92E+08	9.2	3.18E+07	No
100-B-21:3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,049	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	388,389	3.89E+08	9.2	4.23E+07	No
100-B-21:3_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	9.2	1.46E+06	No
100-B-21:3_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	379	563,885	9.2	61,292	No
100-B-21:3_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,176	3.89E+08	9.2	4.23E+07	No
100-B-21:3_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	83	3.89E+08	9.2	4.23E+07	No
100-B-21:3_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	66,201	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	50,545	3.89E+08	9.2	4.23E+07	No
100-B-21:3_Shallow	Rad	Cesium-137	10045-97-3	pCl/g	0.096	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:3_Shallow	Rad	Europium-152	14683-23-9	pCl/g	0.16	— <sup>c</sup>	9.2	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.62E+06	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	866	1.19E+07	30	403,316	No
100-B-21:4_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,557	10,000	30	339	Yes
100-B-21:4_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	63,635	3.89E+08	30	1.32E+07	No
100-B-21:4_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	286	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,191	348,488	30	11,813	No
100-B-21:4_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	120	1,256	30	43	Yes
100-B-21:4_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	32,036	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,438	9.52E+06	30	322,653	No
100-B-21:4_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,168	7.69E+06	30	260,665	No
100-B-21:4_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	300	6,000 <sup>d</sup>	30	6,000 <sup>d</sup>	No
100-B-21:4_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.58E+07	2.92E+08	30	9.91E+06	Yes
100-B-21:4_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,140	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	363,889	3.89E+08	30	1.32E+07	No
100-B-21:4_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	47	1.34E+07	30	455,283	No
100-B-21:4_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	494	563,885	30	19,115	No
100-B-21:4_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,084	3.89E+08	30	1.32E+07	No
100-B-21:4_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	1,040	9,013	30	306	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-21:4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,703	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	68,392	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	50,652	3.89E+08	30	1.32E+07	No
100-B-21:4_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	45	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.25	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	Rad	Eurprium-152	14683-23-9	$\text{pCi}/\text{g}$	1.0	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.049	— <sup>c</sup>	30	— <sup>c</sup>	—
100-B-21:4_Shallow	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	1.4	2,121	30	72	No
100-B-21:4_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.62	— <sup>d</sup>	30	— <sup>d</sup>	—
100-B-21:4_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.57	— <sup>d</sup>	30	— <sup>d</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.19E+07	— <sup>c</sup>	126	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,080	1.19E+07	126	94,203	No
100-B-22:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	6,450	10,000	126	79	Yes
100-B-22:2_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	110,000	3.89E+08	126	3.08E+06	No
100-B-22:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	1,700	— <sup>c</sup>	126	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	9,230	348,488	126	2,759	Yes
100-B-22:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	1,020	1,256	126	9.9	Yes
100-B-22:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	24,800	— <sup>c</sup>	126	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	13,000	9.52E+06	126	75,362	No
100-B-22:2_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	66,700	7.69E+06	126	60,884	Yes
100-B-22:2_Shallow_Focused	non-Rad	Fluoride	16984-48-8	$\mu\text{g}/\text{kg}$	1,600	— <sup>c</sup>	126	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	402	6,000 <sup>d</sup>	126	6,000 <sup>d</sup>	No
100-B-22:2_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	4.43E+07	2.92E+08	126	2.32E+06	Yes
100-B-22:2_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	125,000	— <sup>c</sup>	126	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	479,000	3.89E+08	126	3.08E+06	No
100-B-22:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	319	1.34E+07	126	106,341	No
100-B-22:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	2,000	563,885	126	4,465	No
100-B-22:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	21,300	3.89E+08	126	3.08E+06	No
100-B-22:2_Shallow_Focused	non-Rad	Nitrate	14797-55-8	$\mu\text{g}/\text{kg}$	16,400	107,743	126	853	Yes
100-B-22:2_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	1,960	27,530	126	218	Yes
100-B-22:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	67,600	— <sup>c</sup>	126	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	176,000	3.89E+08	126	3.08E+06	No
100-B-23_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	$\mu\text{g}/\text{kg}$	200	84,728	1,238	68	Yes
100-B-23_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.95E+06	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	1,900	4.27E+07	1,238	34,477	No
100-B-23_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	270	1.19E+07	1,238	9,612	No
100-B-23_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	5.4	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,400	10,000	1,238	8.1	Yes
100-B-23_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	118,000	3.89E+08	1,238	314,267	No
100-B-23_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	490	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	220	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	270	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	290	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	450	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	210	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	14,100	348,488	1,238	282	Yes
100-B-23_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	20	60,438	1,238	49	No
100-B-23_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	1,700	1,256	1,238	1.0	Yes
100-B-23_Shallow_Focused	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	370	537	1,238	0.43	Yes
100-B-23_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,000	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	1,400	— <sup>c</sup>	1,238	— <sup>c</sup>	—
100-B-23_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,700	9.52E+06	1,238	7,690	Yes
100-B-23_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	21,600	7.69E+06	1,238	6,212	Yes
100-B-23_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	50	— <sup>c</sup>	1,238	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-23_Shallow_Focused	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	220	3,353	1,238	2.7	Yes
100-B-23_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	31	88,471	1,238	71	No
100-B-23_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	1,600	3.89E+08	1,238	314,267	No
100-B-23_Shallow_Focused	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	390	97,154	1,238	78	Yes
100-B-23_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	83	- <sup>c</sup>	1,238	- <sup>c</sup>	-
100-B-23_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.07E+07	2.92E+08	1,238	236,250	Yes
100-B-23_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	73,800	- <sup>c</sup>	1,238	- <sup>c</sup>	-
100-B-23_Shallow_Focused	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	8,600	- <sup>c</sup>	1,238	- <sup>c</sup>	-
100-B-23_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	352,000	3.89E+08	1,238	314,267	Yes
100-B-23_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	8,200	1.34E+07	1,238	10,851	No
100-B-23_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	710	563,885	1,238	456	Yes
100-B-23_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,600	3.89E+08	1,238	314,267	No
100-B-23_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	1,200	3.89E+08	1,238	314,267	No
100-B-23_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	570	9,013	1,238	7.3	Yes
100-B-23_Shallow_Focused	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	25,100	3.89E+08	1,238	314,267	No
100-B-23_Shallow_Focused	non-Rad	Tin	7440-31-5	$\mu\text{g}/\text{kg}$	3,200	- <sup>c</sup>	1,238	- <sup>c</sup>	-
100-B-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	173,000	1.00E+06 <sup>d</sup>	1,238	1.00E+06 <sup>d</sup>	No
100-B-23_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	42,900	- <sup>c</sup>	1,238	- <sup>c</sup>	-
100-B-23_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	1.31E+06	3.89E+08	1,238	314,267	Yes
100-B-25_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8.14E+06	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,556	10,000	48	208	Yes
100-B-25_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	81,242	3.89E+08	48	8.10E+06	No
100-B-25_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	246	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,005	348,488	48	7,260	No
100-B-25_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	97	1,256	48	26	Yes
100-B-25_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,581	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,179	9.52E+06	48	198,297	No
100-B-25_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,196	7.69E+06	48	160,200	No
100-B-25_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	164	6,000 <sup>d</sup>	48	6,000 <sup>d</sup>	No
100-B-25_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.69E+07	2.92E+08	48	6.09E+06	Yes
100-B-25_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,006	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	281,444	3.89E+08	48	8.10E+06	No
100-B-25_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	44	1.34E+07	48	279,810	No
100-B-25_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	279	563,885	48	11,748	No
100-B-25_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	16,459	3.89E+08	48	8.10E+06	No
100-B-25_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,156	- <sup>f</sup>	48	- <sup>f</sup>	-
100-B-25_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	37,033	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	35,105	3.89E+08	48	8.10E+06	No
100-B-25_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.55	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	1.1	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	4.5	- <sup>c</sup>	48	- <sup>c</sup>	-
100-B-25_Shallow	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	0.40	2,121	48	44	No
100-B-25_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.78	- <sup>g</sup>	48	- <sup>g</sup>	-
100-B-25_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.72	- <sup>g</sup>	48	- <sup>g</sup>	-
100-B-26_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.16E+06	- <sup>c</sup>	32	- <sup>c</sup>	-
100-B-26_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,200	10,000	32	315	Yes
100-B-26_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	84,700	3.89E+08	32	1.23E+07	No
100-B-26_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	441	- <sup>c</sup>	32	- <sup>c</sup>	-
100-B-26_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,800	348,488	32	10,993	No
100-B-26_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	501	1,256	32	40	Yes
100-B-26_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	39,300	- <sup>c</sup>	32	- <sup>c</sup>	-
100-B-26_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,400	9.52E+06	32	300,261	No
100-B-26_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,200	7.69E+06	32	242,575	No
100-B-26_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	2,020	6,000 <sup>d</sup>	32	6,000 <sup>d</sup>	No
100-B-26_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.79E+07	2.92E+08	32	9.22E+06	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-26_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	17,600	— <sup>c</sup>	32	— <sup>c</sup>	—
100-B-26_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	262,000	3.89E+08	32	1.23E+07	No
100-B-26_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	16	1.34E+07	32	423,686	No
100-B-26_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	206	563,885	32	17,788	No
100-B-26_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	16,500	3.89E+08	32	1.23E+07	No
100-B-26_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	513	9,013	32	284	Yes
100-B-26_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	3,513	— <sup>f</sup>	32	— <sup>f</sup>	—
100-B-26_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	33,700	— <sup>c</sup>	32	— <sup>c</sup>	—
100-B-26_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	108,000	3.89E+08	32	1.23E+07	No
100-B-26_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	3.1	— <sup>c</sup>	32	— <sup>c</sup>	—
100-B-26_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	— <sup>e</sup>	32	— <sup>e</sup>	—
100-B-26_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	— <sup>e</sup>	32	— <sup>e</sup>	—
100-B-27_Deep	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.23E+07	— <sup>c</sup>	47	— <sup>c</sup>	—
100-B-27_Deep	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	464	1.19E+07	47	252,608	No
100-B-27_Deep	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,466	10,000	47	212	Yes
100-B-27_Deep	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	149,745	3.89E+08	47	8.26E+06	No
100-B-27_Deep	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	436	— <sup>c</sup>	47	— <sup>c</sup>	—
100-B-27_Deep	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,099	348,488	47	7,399	No
100-B-27_Deep	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	102	1,256	47	27	Yes
100-B-27_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	13,667	— <sup>c</sup>	47	— <sup>c</sup>	—
100-B-27_Deep	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	14,425	9.52E+06	47	202,086	No
100-B-27_Deep	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	28,589	7.69E+06	47	163,262	No
100-B-27_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	215	6,000 <sup>d</sup>	47	6,000 <sup>d</sup>	No
100-B-27_Deep	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	3.61E+07	2.92E+08	47	6.21E+06	Yes
100-B-27_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,359	— <sup>c</sup>	47	— <sup>c</sup>	—
100-B-27_Deep	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	525,815	3.89E+08	47	8.26E+06	No
100-B-27_Deep	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	471	563,885	47	11,972	No
100-B-27_Deep	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	15,089	3.89E+08	47	8.26E+06	No
100-B-27_Deep	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	208	27,530	47	584	No
100-B-27_Deep	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	86,865	— <sup>c</sup>	47	— <sup>c</sup>	—
100-B-27_Deep	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	69,869	3.89E+08	47	8.26E+06	No
100-B-28_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8.52E+06	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-28_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,446	10,000	25	402	Yes
100-B-28_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	99,189	3.89E+08	25	1.56E+07	No
100-B-28_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	358	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-28_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,012	348,488	25	13,996	No
100-B-28_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	405	1,256	25	50	Yes
100-B-28_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,645	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-28_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	10,094	9.52E+06	25	382,259	No
100-B-28_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	21,585	7.69E+06	25	308,820	No
100-B-28_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	330	6,000 <sup>d</sup>	25	6,000 <sup>d</sup>	No
100-B-28_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.68E+07	2.92E+08	25	1.17E+07	Yes
100-B-28_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,333	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-28_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	401,359	3.89E+08	25	1.56E+07	No
100-B-28_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	76	1.34E+07	25	539,392	No
100-B-28_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	521	563,885	25	22,646	No
100-B-28_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,397	3.89E+08	25	1.56E+07	No
100-B-28_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	64,955	— <sup>c</sup>	25	— <sup>c</sup>	—
100-B-28_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	65,498	3.89E+08	25	1.56E+07	No
100-B-28_Shallow_3	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.06E+07	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-28_Shallow_3	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,728	10,000	19	518	Yes
100-B-28_Shallow_3	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	85,885	3.89E+08	19	2.02E+07	No
100-B-28_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	357	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-28_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,119	348,488	19	18,056	No
100-B-28_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	507	1,256	19	65	Yes
100-B-28_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	17,013	— <sup>c</sup>	19	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

						STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater		STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCl/g)	
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCl/g)	Protection* (µg · m or pCl · m) (µg/kg or pCl/g)	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)		is EPC > Soil Screening Level Protective of Groundwater?
100-B-28_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	11,408	9.52E+06	19	493,174	No
100-B-28_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	18,934	7.69E+06	19	398,426	No
100-B-28_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	200	6,000 <sup>d</sup>	19	6,000 <sup>d</sup>	No
100-B-28_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.58E+07	2.92E+08	19	1.52E+07	Yes
100-B-28_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	7,178	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-28_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	524,239	3.89E+08	19	2.02E+07	No
100-B-28_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	163	1.34E+07	19	695,900	No
100-B-28_Shallow_3	non-Rad	Molybdenum	7439-98-7	µg/kg	370	563,885	19	29,217	No
100-B-28_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	17,186	3.89E+08	19	2.02E+07	No
100-B-28_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	64,702	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-28_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	572,012	3.89E+08	19	2.02E+07	No
100-B-28_Shallow_5	non-Rad	Aluminum	7429-90-5	µg/kg	8.80E+06	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-28_Shallow_5	non-Rad	Antimony	7440-36-0	µg/kg	899	1.19E+07	22	540,810	No
100-B-28_Shallow_5	non-Rad	Arsenic	7440-38-2	µg/kg	4,877	10,000	22	455	Yes
100-B-28_Shallow_5	non-Rad	Barium	7440-39-3	µg/kg	73,328	3.89E+08	22	1.77E+07	No
100-B-28_Shallow_5	non-Rad	Beryllium	7440-41-7	µg/kg	324	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-28_Shallow_5	non-Rad	Boron	7440-42-8	µg/kg	1,868	348,488	22	15,840	No
100-B-28_Shallow_5	non-Rad	Cadmium	7440-43-9	µg/kg	234	1,256	22	57	Yes
100-B-28_Shallow_5	non-Rad	Chromium	7440-47-3	µg/kg	19,369	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-28_Shallow_5	non-Rad	Cobalt	7440-48-4	µg/kg	9,470	9.52E+06	22	432,648	No
100-B-28_Shallow_5	non-Rad	Copper	7440-50-8	µg/kg	19,492	7.69E+06	22	349,528	No
100-B-28_Shallow_5	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	190	6,000 <sup>d</sup>	22	6,000 <sup>d</sup>	No
100-B-28_Shallow_5	non-Rad	Iron	7439-89-6	µg/kg	2.50E+07	2.92E+08	22	1.33E+07	Yes
100-B-28_Shallow_5	non-Rad	Lead	7439-92-1	µg/kg	12,508	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-28_Shallow_5	non-Rad	Manganese	7439-96-5	µg/kg	389,598	3.89E+08	22	1.77E+07	No
100-B-28_Shallow_5	non-Rad	Mercury	7439-97-6	µg/kg	77	1.34E+07	22	610,494	No
100-B-28_Shallow_5	non-Rad	Molybdenum	7439-98-7	µg/kg	775	563,885	22	25,631	No
100-B-28_Shallow_5	non-Rad	Nickel	7440-02-0	µg/kg	14,338	3.89E+08	22	1.77E+07	No
100-B-28_Shallow_5	non-Rad	Vanadium	7440-62-2	µg/kg	58,291	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-28_Shallow_5	non-Rad	Zinc	7440-66-6	µg/kg	51,942	3.89E+08	22	1.77E+07	No
100-B-28_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.85E+07	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	1.9	4.27E+07	151	283,372	No
100-B-28_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,000	1.19E+07	151	79,003	No
100-B-28_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	8,020	10,000	151	66	Yes
100-B-28_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	98,100	3.89E+08	151	2.58E+06	No
100-B-28_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	47	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	60	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	82	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	31	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	572	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,710	348,488	151	2,314	No
100-B-28_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	141	1,256	151	8.3	Yes
100-B-28_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	50,100	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	37	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,600	9.52E+06	151	63,202	No
100-B-28_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	31,000	7.69E+06	151	51,060	No
100-B-28_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	8.0	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	101	3.89E+08	151	2.58E+06	No
100-B-28_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	1.0	97,154	151	645	No
100-B-28_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	6,000 <sup>d</sup>	151	6,000 <sup>d</sup>	No
100-B-28_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	48	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.69E+07	2.92E+08	151	1.94E+06	Yes
100-B-28_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,700	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	494,000	3.89E+08	151	2.58E+06	No
100-B-28_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	804	1.34E+07	151	89,182	No
100-B-28_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	566	563,885	151	3,744	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-28_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	17,200	3.89E+08	151	2.58E+06	No
100-B-28_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g/kg}$	34	3.89E+08	151	2.58E+06	No
100-B-28_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	106,000	— <sup>c</sup>	151	— <sup>c</sup>	—
100-B-28_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	81,700	3.89E+08	151	2.58E+06	No
100-B-31_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	7,24E+06	— <sup>c</sup>	15	— <sup>c</sup>	—
100-B-31_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g/kg}$	1,096	1.19E+07	15	787,936	No
100-B-31_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	5,007	10,000	15	662	Yes
100-B-31_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	66,123	3.89E+08	15	2.58E+07	No
100-B-31_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	263	— <sup>c</sup>	15	— <sup>c</sup>	—
100-B-31_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	1,934	348,488	15	23,079	No
100-B-31_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	159	1,256	15	83	Yes
100-B-31_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	17,815	— <sup>c</sup>	15	— <sup>c</sup>	—
100-B-31_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	8,635	9.52E+06	15	630,348	No
100-B-31_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	30,009	7.69E+06	15	509,246	No
100-B-31_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	173	6,000 <sup>d</sup>	15	6,000 <sup>d</sup>	No
100-B-31_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	2.37E+07	2.92E+08	15	1.94E+07	Yes
100-B-31_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	78,974	— <sup>c</sup>	15	— <sup>c</sup>	—
100-B-31_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	376,677	3.89E+08	15	2.58E+07	No
100-B-31_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	112	1.34E+07	15	889,461	No
100-B-31_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	4,483	563,885	15	37,343	No
100-B-31_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	12,098	3.89E+08	15	2.58E+07	No
100-B-31_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	856	9,013	15	597	Yes
100-B-31_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	55,070	— <sup>c</sup>	15	— <sup>c</sup>	—
100-B-31_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	63,292	3.89E+08	15	2.58E+07	No
100-B-32_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.52	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-B-33_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	1.07E+07	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,550	10,000	4.2	2,381	Yes
100-B-33_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	102,000	3.89E+08	4.2	9.26E+07	No
100-B-33_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	408	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	4,670	348,488	4.2	82,973	No
100-B-33_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	133	1,256	4.2	299	No
100-B-33_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	13,100	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	8,710	9.52E+06	4.2	2.27E+06	No
100-B-33_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	16,500	7.69E+06	4.2	1.83E+06	No
100-B-33_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	2.47E+07	2.92E+08	4.2	6.96E+07	No
100-B-33_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	6,870	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	409,000	3.89E+08	4.2	9.26E+07	No
100-B-33_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	12	1.34E+07	4.2	3.20E+06	No
100-B-33_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	13,200	3.89E+08	4.2	9.26E+07	No
100-B-33_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	898	9,013	4.2	2,146	No
100-B-33_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	1,447	— <sup>f</sup>	4.2	— <sup>f</sup>	—
100-B-33_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	58,200	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	48,700	3.89E+08	4.2	9.26E+07	No
100-B-33_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.13	— <sup>c</sup>	4.2	— <sup>c</sup>	—
100-B-33_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	— <sup>g</sup>	4.2	— <sup>g</sup>	—
100-B-33_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.49	— <sup>g</sup>	4.2	— <sup>g</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	1.39E+07	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g/kg}$	1,300	1.19E+07	22	535,938	No
100-B-35:1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g/kg}$	26	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	9,600	10,000	22	450	Yes
100-B-35:1_Deep_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	81,600	3.89E+08	22	1.75E+07	No
100-B-35:1_Deep_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	280	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	1,500	348,488	22	15,698	No
100-B-35:1_Deep_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	220	1,256	22	57	Yes



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Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-35:1_Deep_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,300	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	11,900	9.52E+06	22	428,751	No
100-B-35:1_Deep_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	23,200	7.69E+06	22	346,379	No
100-B-35:1_Deep_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	3.19E+07	2.92E+08	22	1.32E+07	Yes
100-B-35:1_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	12,200	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	502,000	3.89E+08	22	1.75E+07	No
100-B-35:1_Deep_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	17,500	3.89E+08	22	1.75E+07	No
100-B-35:1_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	$\mu\text{g}/\text{kg}$	55,000	2.00E+06 <sup>d</sup>	22	2.00E+06 <sup>d</sup>	No
100-B-35:1_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	$\mu\text{g}/\text{kg}$	58,000	2.00E+06 <sup>d</sup>	22	2.00E+06 <sup>d</sup>	No
100-B-35:1_Deep_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	72,200	— <sup>c</sup>	22	— <sup>c</sup>	—
100-B-35:1_Deep_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	59,900	3.89E+08	22	1.75E+07	No
100-B-35:1_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8.57E+06	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,061	1.19E+07	122	97,523	No
100-B-35:1_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	7.4	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	3.0	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,148	10,000	122	82	Yes
100-B-35:1_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	64,766	3.89E+08	122	3.19E+06	No
100-B-35:1_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	15	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	17	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	65	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	10	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	126	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,423	348,488	122	2,856	No
100-B-35:1_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	151	1,256	122	10	Yes
100-B-35:1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,942	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	13	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,325	9.52E+06	122	78,019	No
100-B-35:1_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	19,504	7.69E+06	122	63,030	No
100-B-35:1_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	17	3.89E+08	122	3.19E+06	No
100-B-35:1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	26	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.49E+07	2.92E+08	122	2.40E+06	Yes
100-B-35:1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,650	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	368,864	3.89E+08	122	3.19E+06	No
100-B-35:1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	14	1.34E+07	122	110,089	No
100-B-35:1_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	370	563,885	122	4,622	No
100-B-35:1_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,876	3.89E+08	122	3.19E+06	No
100-B-35:1_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	15	3.89E+08	122	3.19E+06	No
100-B-35:1_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	$\mu\text{g}/\text{kg}$	9,369	2.00E+06 <sup>d</sup>	122	2.00E+06 <sup>d</sup>	No
100-B-35:1_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESELEXT	$\mu\text{g}/\text{kg}$	11,859	2.00E+06 <sup>d</sup>	122	2.00E+06 <sup>d</sup>	No
100-B-35:1_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	61,150	— <sup>c</sup>	122	— <sup>c</sup>	—
100-B-35:1_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	62,837	3.89E+08	122	3.19E+06	No
100-B-35:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.35E+06	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	3,570	1.19E+07	16	748,291	No
100-B-35:2_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	42	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	1,620	10,000	16	629	Yes
100-B-35:2_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	51,600	3.89E+08	16	2.45E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	67	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	77	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	74	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	318	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,500	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	54	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,460	9.52E+06	16	598,633	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow* (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-35:2_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	21,800	7.69E+06	16	483,624	No
100-B-35:2_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	7.7	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	63	3.89E+08	16	2.45E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Indeno[1,2,3-cd]pyrene	193-39-5	$\mu\text{g}/\text{kg}$	63	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1,58E+07	2.92E+08	16	1.84E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	12,700	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	234,000	3.89E+08	16	2.45E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	9.3	1.34E+07	16	844,708	No
100-B-35:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	9,660	3.89E+08	16	2.45E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	62	3.89E+08	16	2.45E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	569	27,530	16	1,731	No
100-B-35:2_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPH/DIESEL	$\mu\text{g}/\text{kg}$	3,580	2.00E+06 <sup>d</sup>	16	2.00E+06 <sup>d</sup>	No
100-B-35:2_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	$\mu\text{g}/\text{kg}$	19,300	2.00E+06 <sup>d</sup>	16	2.00E+06 <sup>d</sup>	No
100-B-35:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	48,400	— <sup>c</sup>	16	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	158,000	3.89E+08	16	2.45E+07	No
100-B-5_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	297,000	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,940	6,000 <sup>a</sup>	28	6,000 <sup>a</sup>	No
100-B-5_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,200	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	5,040	1.34E+07	28	486,625	No
100-B-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,230	— <sup>f</sup>	28	— <sup>f</sup>	—
100-B-5_Deep	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.97	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	22	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	1.5	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	15	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	1.4	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Plutonium-238	13981-16-3	$\text{pCi}/\text{g}$	0.26	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	3.4	— <sup>c</sup>	28	— <sup>c</sup>	—
100-B-5_Deep	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	1.9	2,121	28	77	No
100-B-5_Deep	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.79	— <sup>a</sup>	28	— <sup>a</sup>	—
100-B-5_Deep	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.75	— <sup>a</sup>	28	— <sup>a</sup>	—
100-B-5_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,803	— <sup>c</sup>	52	— <sup>c</sup>	—
100-B-5_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,958	— <sup>c</sup>	52	— <sup>c</sup>	—
100-B-5_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	17	1.34E+07	52	257,296	No
100-B-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,870	— <sup>f</sup>	52	— <sup>f</sup>	—
100-B-5_Shallow	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.11	— <sup>c</sup>	52	— <sup>c</sup>	—
100-B-5_Shallow	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.35	— <sup>c</sup>	52	— <sup>c</sup>	—
100-B-5_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.62	— <sup>a</sup>	52	— <sup>a</sup>	—
100-B-5_Shallow	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.088	— <sup>a</sup>	52	— <sup>a</sup>	—
100-B-5_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.63	— <sup>a</sup>	52	— <sup>a</sup>	—
100-B-8:1_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	55,800	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	483	6,000 <sup>a</sup>	29	6,000 <sup>a</sup>	No
100-B-8:1_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,764	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	237	1.34E+07	29	464,736	No
100-B-8:1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,774	— <sup>f</sup>	29	— <sup>f</sup>	—
100-B-8:1_Deep	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.44	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	9.6	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	2.7	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.75	— <sup>c</sup>	29	— <sup>c</sup>	—
100-B-8:1_Deep	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	2.3	2,121	29	73	No
100-B-8:1_Deep	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.66	— <sup>a</sup>	29	— <sup>a</sup>	—
100-B-8:1_Deep	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.60	— <sup>a</sup>	29	— <sup>a</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-8:1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	16,055	— <sup>c</sup>	49	— <sup>c</sup>	—
100-B-8:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	286	6,000 <sup>d</sup>	49	6,000 <sup>d</sup>	No
100-B-8:1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	37,866	— <sup>c</sup>	49	— <sup>c</sup>	—
100-B-8:1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	48	1.34E+07	49	276,355	No
100-B-8:1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	1,792	— <sup>f</sup>	49	— <sup>f</sup>	—
100-B-8:1_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.20	— <sup>c</sup>	49	— <sup>c</sup>	—
100-B-8:1_Shallow	Rad	Europium-152	14683-23-9	$\text{pCi/g}$	0.29	— <sup>c</sup>	49	— <sup>c</sup>	—
100-B-8:1_Shallow	Rad	Plutonium-239/240	PU-239/240	$\text{pCi/g}$	0.069	— <sup>c</sup>	49	— <sup>c</sup>	—
100-B-8:1_Shallow	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi/g}$	0.32	2,121	49	44	No
100-B-8:1_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi/g}$	0.57	— <sup>g</sup>	49	— <sup>g</sup>	—
100-B-8:1_Shallow	Rad	Uranium-235	15117-96-1	$\text{pCi/g}$	0.037	— <sup>g</sup>	49	— <sup>g</sup>	—
100-B-8:1_Shallow	Rad	Uranium-238	U-238	$\text{pCi/g}$	0.55	— <sup>g</sup>	49	— <sup>g</sup>	—
100-B-8:2_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	65,806	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	1,989	6,000 <sup>d</sup>	19	6,000 <sup>d</sup>	No
100-B-8:2_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	4,278	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	145	1.34E+07	19	699,524	No
100-B-8:2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	1,590	— <sup>f</sup>	19	— <sup>f</sup>	—
100-B-8:2_Deep	Rad	Americium-241	14596-10-2	$\text{pCi/g}$	1.1	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	13	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	Rad	Cobalt-60	10198-40-0	$\text{pCi/g}$	0.56	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	Rad	Europium-152	14683-23-9	$\text{pCi/g}$	5.1	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	Rad	Europium-154	15585-10-1	$\text{pCi/g}$	0.99	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	Rad	Plutonium-239/240	PU-239/240	$\text{pCi/g}$	0.76	— <sup>c</sup>	19	— <sup>c</sup>	—
100-B-8:2_Deep	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi/g}$	2.7	2,121	19	110	No
100-B-8:2_Deep	Rad	Uranium-233/234	U-233/234	$\text{pCi/g}$	0.54	— <sup>g</sup>	19	— <sup>g</sup>	—
100-B-8:2_Deep	Rad	Uranium-238	U-238	$\text{pCi/g}$	0.53	— <sup>g</sup>	19	— <sup>g</sup>	—
100-B-8:2_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	16,449	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	555	6,000 <sup>d</sup>	31	6,000 <sup>d</sup>	No
100-B-8:2_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	5,532	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	23	1.34E+07	31	434,656	No
100-B-8:2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	1,664	— <sup>f</sup>	31	— <sup>f</sup>	—
100-B-8:2_Shallow_1	Rad	Americium-241	14596-10-2	$\text{pCi/g}$	0.28	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.62	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Rad	Cobalt-60	10198-40-0	$\text{pCi/g}$	0.095	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Rad	Europium-152	14683-23-9	$\text{pCi/g}$	0.32	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Rad	Europium-154	15585-10-1	$\text{pCi/g}$	0.38	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Rad	Plutonium-239/240	PU-239/240	$\text{pCi/g}$	0.36	— <sup>c</sup>	31	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi/g}$	1.6	2,121	31	69	No
100-B-8:2_Shallow_1	Rad	Uranium-233/234	U-233/234	$\text{pCi/g}$	0.59	— <sup>g</sup>	31	— <sup>g</sup>	—
100-B-8:2_Shallow_1	Rad	Uranium-238	U-238	$\text{pCi/g}$	0.56	— <sup>g</sup>	31	— <sup>g</sup>	—
100-B-8:2_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	15,897	— <sup>c</sup>	50	— <sup>c</sup>	—
100-B-8:2_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	4,150	— <sup>c</sup>	50	— <sup>c</sup>	—
100-B-8:2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	1,729	— <sup>f</sup>	50	— <sup>f</sup>	—
100-B-8:2_Shallow_3	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.55	— <sup>c</sup>	50	— <sup>c</sup>	—
100-B-8:2_Shallow_3	Rad	Europium-152	14683-23-9	$\text{pCi/g}$	0.56	— <sup>c</sup>	50	— <sup>c</sup>	—
100-B-8:2_Shallow_3	Rad	Nickel-63	13981-37-8	$\text{pCi/g}$	3.6	— <sup>c</sup>	50	— <sup>c</sup>	—
100-B-8:2_Shallow_3	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi/g}$	1.8	2,121	50	43	No
100-B-8:2_Shallow_3	Rad	Uranium-233/234	U-233/234	$\text{pCi/g}$	0.58	— <sup>g</sup>	50	— <sup>g</sup>	—
100-B-8:2_Shallow_3	Rad	Uranium-238	U-238	$\text{pCi/g}$	0.58	— <sup>g</sup>	50	— <sup>g</sup>	—
100-C-3_Shallow	non-Rad	Acetone	67-64-1	$\mu\text{g/kg}$	3.2	17,372	8.6	2,020	No
100-C-3_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	2,500	10,000	8.6	1,163	Yes
100-C-3_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	62,500	3.89E+08	8.6	4.52E+07	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-C-3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	269	— <sup>c</sup>	8.6	— <sup>c</sup>	—
100-C-3_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	278	1,256	8.6	146	Yes
100-C-3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,500	— <sup>c</sup>	8.6	— <sup>c</sup>	—
100-C-3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,000	— <sup>c</sup>	8.6	— <sup>c</sup>	—
100-C-3_Shallow	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	16	14	8.6	1.6	Yes
100-C-3_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	487	9,013	8.6	1,048	No
100-C-3_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	112	27,530	8.6	3,201	No
100-C-3_Shallow	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	9.1	4,437	8.6	516	No
100-C-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,084	— <sup>d</sup>	8.6	— <sup>d</sup>	—
100-C-3_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCl}/\text{g}$	0.15	— <sup>e</sup>	8.6	— <sup>e</sup>	—
100-C-3_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCl}/\text{g}$	0.71	— <sup>f</sup>	8.6	— <sup>f</sup>	—
100-C-3_Shallow	Rad	Uranium-238	U-238	$\text{pCl}/\text{g}$	0.70	— <sup>g</sup>	8.6	— <sup>g</sup>	—
100-C-7_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.17E+06	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,692	10,000	36	280	Yes
100-C-7_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	57,480	3.89E+08	36	1.09E+07	No
100-C-7_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	288	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,157	348,488	36	9,762	No
100-C-7_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	92	1,256	36	35	Yes
100-C-7_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,051	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,957	9.52E+06	36	266,618	No
100-C-7_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,161	7.69E+06	36	215,396	No
100-C-7_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.27E+07	2.92E+08	36	8.19E+06	Yes
100-C-7_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,444	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	331,459	3.89E+08	36	1.09E+07	No
100-C-7_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	179	1.34E+07	36	376,215	No
100-C-7_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	447	563,885	36	15,795	No
100-C-7_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,443	3.89E+08	36	1.09E+07	No
100-C-7_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	63,129	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	46,026	3.89E+08	36	1.09E+07	No
100-C-7_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	3.74E+06	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	1,398	10,000	36	279	Yes
100-C-7_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	44,286	3.89E+08	36	1.08E+07	No
100-C-7_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	188	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	73	1,256	36	35	Yes
100-C-7_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	2,573	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,736	9.52E+06	36	265,133	No
100-C-7_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	14,385	7.69E+06	36	214,196	No
100-C-7_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.23E+07	2.92E+08	36	8.15E+06	Yes
100-C-7_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	2,259	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	264,954	3.89E+08	36	1.08E+07	No
100-C-7_Shallow_2	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	328	563,885	36	15,707	No
100-C-7_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	5,081	3.89E+08	36	1.08E+07	No
100-C-7_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	58,819	— <sup>c</sup>	36	— <sup>c</sup>	—
100-C-7_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	37,568	3.89E+08	36	1.08E+07	No
100-C-7:1_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8.10E+06	— <sup>c</sup>	55	— <sup>c</sup>	—
100-C-7:1_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,482	10,000	55	181	Yes
100-C-7:1_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	63,124	3.89E+08	55	7.02E+06	No
100-C-7:1_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	295	— <sup>c</sup>	55	— <sup>c</sup>	—
100-C-7:1_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,608	348,488	55	6,290	No
100-C-7:1_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	84	1,256	55	23	Yes
100-C-7:1_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,876	— <sup>c</sup>	55	— <sup>c</sup>	—
100-C-7:1_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,282	9.52E+06	55	171,810	No
100-C-7:1_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,632	7.69E+06	55	138,802	No
100-C-7:1_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.24E+07	2.92E+08	55	5.28E+06	Yes
100-C-7:1_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,004	— <sup>c</sup>	55	— <sup>c</sup>	—
100-C-7:1_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	343,222	3.89E+08	55	7.02E+06	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-C-7:1_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	24	1.34E+07	55	242,434	No
100-C-7:1_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	373	563,885	55	10,178	No
100-C-7:1_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,250	3.89E+08	55	7.02E+06	No
100-C-7:1_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	61,594	- <sup>c</sup>	55	- <sup>c</sup>	-
100-C-7:1_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	44,300	3.89E+08	55	7.02E+06	No
100-C-7:1_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	4.54E+06	- <sup>c</sup>	52	- <sup>c</sup>	-
100-C-7:1_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	1,420	10,000	52	194	Yes
100-C-7:1_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	57,186	3.89E+08	52	7.54E+06	No
100-C-7:1_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	212	- <sup>c</sup>	52	- <sup>c</sup>	-
100-C-7:1_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	633	348,488	52	6,754	No
100-C-7:1_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	45	1,256	52	24	Yes
100-C-7:1_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	3,298	- <sup>c</sup>	52	- <sup>c</sup>	-
100-C-7:1_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,114	9.52E+06	52	184,462	No
100-C-7:1_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	12,752	7.69E+06	52	149,024	No
100-C-7:1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	620	6,000 <sup>d</sup>	52	6,000 <sup>d</sup>	No
100-C-7:1_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.03E+07	2.92E+08	52	5.67E+06	Yes
100-C-7:1_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	1,807	- <sup>c</sup>	52	- <sup>c</sup>	-
100-C-7:1_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	292,818	3.89E+08	52	7.54E+06	No
100-C-7:1_Shallow_2	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	315	563,885	52	10,928	No
100-C-7:1_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	5,395	3.89E+08	52	7.54E+06	No
100-C-7:1_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	55,467	- <sup>c</sup>	52	- <sup>c</sup>	-
100-C-7:1_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	36,539	3.89E+08	52	7.54E+06	No
100-C-7:1_Shallow_3	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.89E+06	- <sup>c</sup>	104	- <sup>c</sup>	-
100-C-7:1_Shallow_3	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,617	10,000	104	97	Yes
100-C-7:1_Shallow_3	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	73,483	3.89E+08	104	3.76E+06	No
100-C-7:1_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	298	- <sup>c</sup>	104	- <sup>c</sup>	-
100-C-7:1_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,770	348,488	104	3,367	No
100-C-7:1_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	152	1,256	104	12	Yes
100-C-7:1_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,331	- <sup>c</sup>	104	- <sup>c</sup>	-
100-C-7:1_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,644	9.52E+06	104	91,964	No
100-C-7:1_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	18,845	7.69E+06	104	74,296	No
100-C-7:1_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.84E+07	2.92E+08	104	2.83E+06	Yes
100-C-7:1_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,032	- <sup>c</sup>	104	- <sup>c</sup>	-
100-C-7:1_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	358,358	3.89E+08	104	3.76E+06	No
100-C-7:1_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	12	1.34E+07	104	129,767	No
100-C-7:1_Shallow_3	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	645	563,885	104	5,448	No
100-C-7:1_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,337	3.89E+08	104	3.76E+06	No
100-C-7:1_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	81,618	- <sup>c</sup>	104	- <sup>c</sup>	-
100-C-7:1_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	50,985	3.89E+08	104	3.76E+06	No
100-C-9:1_Deep_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	3.88E+06	- <sup>c</sup>	2.0	- <sup>c</sup>	-
100-C-9:1_Deep_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	430	1.19E+07	2.0	5.95E+06	No
100-C-9:1_Deep_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,700	10,000	2.0	5,000	No
100-C-9:1_Deep_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	46,000	3.89E+08	2.0	1.95E+08	No
100-C-9:1_Deep_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	1,800	- <sup>c</sup>	2.0	- <sup>c</sup>	-
100-C-9:1_Deep_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,900	348,488	2.0	174,244	No
100-C-9:1_Deep_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	60	1,256	2.0	628	No
100-C-9:1_Deep_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	16,100	- <sup>c</sup>	2.0	- <sup>c</sup>	-
100-C-9:1_Deep_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,100	9.52E+06	2.0	4.76E+06	No
100-C-9:1_Deep_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	37,300	7.69E+06	2.0	3.84E+06	No
100-C-9:1_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,700	6,000 <sup>d</sup>	2.0	6,000 <sup>d</sup>	No
100-C-9:1_Deep_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.69E+07	2.92E+08	2.0	1.46E+08	No
100-C-9:1_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	15,300	- <sup>c</sup>	2.0	- <sup>c</sup>	-
100-C-9:1_Deep_Focused	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	3,400	- <sup>c</sup>	2.0	- <sup>c</sup>	-
100-C-9:1_Deep_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	311,000	3.89E+08	2.0	1.95E+08	No
100-C-9:1_Deep_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	2,900	1.34E+07	2.0	6.72E+06	No
100-C-9:1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	620	563,885	2.0	281,942	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCl/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCl}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCl/g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-C-9:1_Deep_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	6,800	3.89E+08	2.0	1.95E+08	No
100-C-9:1_Deep_Focused	non-Rad	Strontium	7440-24-6	$\mu\text{g/kg}$	18,200	3.89E+08	2.0	1.95E+08	No
100-C-9:1_Deep_Focused	non-Rad	Tin	7440-31-5	$\mu\text{g/kg}$	4,500	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:1_Deep_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	66,300	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:1_Deep_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	47,600	3.89E+08	2.0	1.95E+08	No
100-C-9:1_Deep_Focused	Rad	Cesium-137	10045-97-3	$\text{pCl/g}$	0.15	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:1_Shallow_1	non-Rad	Antimony	7440-36-0	$\mu\text{g/kg}$	470	1.19E+07	112	106,231	No
100-C-9:1_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,304	10,000	112	89	Yes
100-C-9:1_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	68,483	3.89E+08	112	3.47E+06	No
100-C-9:1_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	328	— <sup>c</sup>	112	— <sup>c</sup>	—
100-C-9:1_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	836	348,488	112	3,112	No
100-C-9:1_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	145	1,256	112	11	Yes
100-C-9:1_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	8,505	— <sup>c</sup>	112	— <sup>c</sup>	—
100-C-9:1_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	8,098	9.52E+06	112	84,984	No
100-C-9:1_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	16,720	7.69E+06	112	68,657	No
100-C-9:1_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	421	6,000 <sup>d</sup>	112	6,000 <sup>d</sup>	No
100-C-9:1_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	4,050	— <sup>c</sup>	112	— <sup>c</sup>	—
100-C-9:1_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	316,608	3.89E+08	112	3.47E+06	No
100-C-9:1_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	44	1.34E+07	112	119,918	No
100-C-9:1_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	424	563,885	112	5,035	No
100-C-9:1_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	10,764	3.89E+08	112	3.47E+06	No
100-C-9:1_Shallow_1	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	474	9,013	112	80	Yes
100-C-9:1_Shallow_1	non-Rad	Silver	7440-22-4	$\mu\text{g/kg}$	81	27,530	112	246	No
100-C-9:1_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	46,252	— <sup>c</sup>	112	— <sup>c</sup>	—
100-C-9:1_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	40,749	3.89E+08	112	3.47E+06	No
100-C-9:1_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	6.76E+06	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Antimony	7440-36-0	$\mu\text{g/kg}$	513	1.19E+07	26	455,855	No
100-C-9:1_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	4,983	10,000	26	383	Yes
100-C-9:1_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	75,252	3.89E+08	26	1.49E+07	No
100-C-9:1_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	398	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	1,235	348,488	26	13,352	No
100-C-9:1_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	260	1,256	26	48	Yes
100-C-9:1_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	16,359	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	9,787	9.52E+06	26	364,684	No
100-C-9:1_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	18,114	7.69E+06	26	294,621	No
100-C-9:1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	426	6,000 <sup>d</sup>	26	6,000 <sup>d</sup>	No
100-C-9:1_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	2.35E+07	2.92E+08	26	1.12E+07	Yes
100-C-9:1_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	6,459	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Lithium	7439-93-2	$\mu\text{g/kg}$	8,109	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	402,742	3.89E+08	26	1.49E+07	No
100-C-9:1_Shallow_2	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	1,886	1.34E+07	26	514,592	No
100-C-9:1_Shallow_2	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	367	563,885	26	21,605	No
100-C-9:1_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	12,476	3.89E+08	26	1.49E+07	No
100-C-9:1_Shallow_2	non-Rad	Strontium	7440-24-6	$\mu\text{g/kg}$	28,900	3.89E+08	26	1.49E+07	No
100-C-9:1_Shallow_2	non-Rad	Tin	7440-31-5	$\mu\text{g/kg}$	3,100	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	49,792	— <sup>c</sup>	26	— <sup>c</sup>	—
100-C-9:1_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	48,244	3.89E+08	26	1.49E+07	No
100-C-9:1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,200	10,000	349	29	Yes
100-C-9:1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	162,000	3.89E+08	349	1.12E+06	No
100-C-9:1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	340	1,256	349	3.6	Yes
100-C-9:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	17,300	— <sup>c</sup>	349	— <sup>c</sup>	—
100-C-9:1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	396	6,000 <sup>d</sup>	349	6,000 <sup>d</sup>	No
100-C-9:1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	4,900	— <sup>c</sup>	349	— <sup>c</sup>	—
100-C-9:1_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	430	9,013	349	26	Yes
100-C-9:2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g/kg}$	1.2	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	5.49E+06	— <sup>c</sup>	12	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow* (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-C-9:2_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,827	10,000	12	855	Yes
100-C-9:2_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	62,909	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	48	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	45	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	454	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	258	1,256	12	107	Yes
100-C-9:2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,580	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	55	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,997	9.52E+06	12	813,527	No
100-C-9:2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,494	7.69E+06	12	657,232	No
100-C-9:2_Shallow	non-Rad	Dieldrin	60-57-1	$\mu\text{g}/\text{kg}$	1.7	166	12	14	No
100-C-9:2_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	81	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	324	6,000 <sup>d</sup>	12	6,000 <sup>d</sup>	No
100-C-9:2_Shallow	non-Rad	Indeno[1,2,3-cd]pyrene	193-39-5	$\mu\text{g}/\text{kg}$	29	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.94E+07	2.92E+08	12	2.50E+07	No
100-C-9:2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	13,131	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	6,540	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	341,053	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	40	1.34E+07	12	1.15E+06	No
100-C-9:2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	418	563,885	12	48,195	No
100-C-9:2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,637	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	94	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	22,407	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	46,900	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	263,884	3.89E+08	12	3.32E+07	No
100-C-9:2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCl}/\text{g}$	0.13	— <sup>c</sup>	12	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g}/\text{kg}$	3.5	836,540	15	56,523	No
100-C-9:2_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	14	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	5.1	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.30E+06	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	970	1.19E+07	15	803,907	No
100-C-9:2_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	120	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	11	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,400	10,000	15	676	Yes
100-C-9:2_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	74,100	3.89E+08	15	2.63E+07	No
100-C-9:2_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	73	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	23	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	510	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	250	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,100	348,488	15	23,546	No
100-C-9:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	500	1,256	15	85	Yes
100-C-9:2_Shallow_Focused	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	1.6	1.42E+06	15	96,016	No
100-C-9:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	16,500	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	82	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,900	9.52E+06	15	643,126	No
100-C-9:2_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	66,100	7.69E+06	15	519,569	No
100-C-9:2_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	40	88,471	15	5,978	No
100-C-9:2_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	$\mu\text{g}/\text{kg}$	0.64	7,192	15	486	No
100-C-9:2_Shallow_Focused	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	3.6	1,219	15	82	No
100-C-9:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	830	6,000 <sup>d</sup>	15	6,000 <sup>d</sup>	No
100-C-9:2_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	3.18E+07	2.92E+08	15	1.98E+07	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
100-C-9:2_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	152,000	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	7,200	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	456,000	3.89E+08	15	2.63E+07	No
100-C-9:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	850	1.34E+07	15	907,491	No
100-C-9:2_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	7.3	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,900	563,885	15	38,100	No
100-C-9:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	22,000	3.89E+08	15	2.63E+07	No
100-C-9:2_Shallow_Focused	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	32,700	3.89E+08	15	2.63E+07	No
100-C-9:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	58,400	— <sup>c</sup>	15	— <sup>c</sup>	—
100-C-9:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	111,000	3.89E+08	15	2.63E+07	No
100-C-9:3_Deep_Focused	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	1,100	2,896	2.0	1,448	No
100-C-9:3_Deep_Focused	non-Rad	Acenaphthene	83-32-9	$\mu\text{g}/\text{kg}$	6,800	84,728	2.0	42,364	No
100-C-9:3_Deep_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.51E+06	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	13,000	4.27E+07	2.0	2.13E+07	No
100-C-9:3_Deep_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	2,100	1.19E+07	2.0	5.95E+06	No
100-C-9:3_Deep_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	6,500	10,000	2.0	5,000	Yes
100-C-9:3_Deep_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	66,700	3.89E+08	2.0	1.95E+08	No
100-C-9:3_Deep_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	20,000	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	13,000	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	11,000	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	12,000	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	330	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,300	348,488	2.0	174,244	No
100-C-9:3_Deep_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	200	1,256	2.0	628	No
100-C-9:3_Deep_Focused	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	7,300	537	2.0	268	Yes
100-C-9:3_Deep_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,800	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	20,000	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,200	9.52E+06	2.0	4.76E+06	No
100-C-9:3_Deep_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	19,600	7.69E+06	2.0	3.84E+06	No
100-C-9:3_Deep_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	2,200	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	3,000	3,353	2.0	1,677	Yes
100-C-9:3_Deep_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	52,000	3.89E+08	2.0	1.95E+08	No
100-C-9:3_Deep_Focused	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	5,800	97,154	2.0	48,577	No
100-C-9:3_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	610	6,000 <sup>d</sup>	2.0	6,000 <sup>d</sup>	No
100-C-9:3_Deep_Focused	non-Rad	Indeno[1,2,3-cd]pyrene	193-39-5	$\mu\text{g}/\text{kg}$	5,600	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.55E+07	2.92E+08	2.0	1.46E+08	No
100-C-9:3_Deep_Focused	non-Rad	Isophorone	78-59-1	$\mu\text{g}/\text{kg}$	280	330	2.0	165	Yes
100-C-9:3_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,300	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	412,000	3.89E+08	2.0	1.95E+08	No
100-C-9:3_Deep_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	640	563,885	2.0	281,942	No
100-C-9:3_Deep_Focused	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	2,100	6,798	2.0	3,399	No
100-C-9:3_Deep_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	14,500	3.89E+08	2.0	1.95E+08	No
100-C-9:3_Deep_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	35,000	3.89E+08	2.0	1.95E+08	No
100-C-9:3_Deep_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	140	27,530	2.0	13,765	No
100-C-9:3_Deep_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	63,900	— <sup>c</sup>	2.0	— <sup>c</sup>	—
100-C-9:3_Deep_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	54,900	3.89E+08	2.0	1.95E+08	No
116-B-1_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	16,456	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	363	6,000 <sup>d</sup>	20	6,000 <sup>d</sup>	No
116-B-1_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,795	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	20	671,543	No
116-B-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes		2,834	— <sup>f</sup>	20	— <sup>f</sup>	—
116-B-1_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.052	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	3.1	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.17	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	Rad	Europium-152	14683-23-9	pCi/g	7.1	— <sup>c</sup>	20	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-1_Deep	Rad	Eurpium-154	15585-10-1	pCi/g	0.36	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.22	— <sup>c</sup>	20	— <sup>c</sup>	—
116-B-1_Deep	Rad	Total beta radiostromium	SR-RAD	pCi/g	1.4	2,121	20	106	No
116-B-1_Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.1	— <sup>d</sup>	20	— <sup>d</sup>	—
116-B-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.045	— <sup>d</sup>	20	— <sup>d</sup>	—
116-B-1_Deep	Rad	Uranium-238	U-238	pCi/g	0.95	— <sup>d</sup>	20	— <sup>d</sup>	—
116-B-1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,550	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,613	6,000 <sup>d</sup>	11	6,000 <sup>d</sup>	No
116-B-1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,699	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	19	1.34E+07	11	1.24E+06	No
116-B-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,247	— <sup>f</sup>	11	— <sup>f</sup>	—
116-B-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.19	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.11	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	Rad	Eurpium-152	14683-23-9	pCi/g	0.75	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	Rad	Eurpium-154	15585-10-1	pCi/g	0.18	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.031	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.72	— <sup>d</sup>	11	— <sup>d</sup>	—
116-B-1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	— <sup>d</sup>	11	— <sup>d</sup>	—
116-B-10_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	23,800	— <sup>c</sup>	8.4	— <sup>c</sup>	—
116-B-10_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,000	— <sup>c</sup>	8.4	— <sup>c</sup>	—
116-B-10_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	1,300	1.34E+07	8.4	1.60E+06	No
116-B-10_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,122	— <sup>f</sup>	8.4	— <sup>f</sup>	—
116-B-10_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.034	— <sup>c</sup>	8.4	— <sup>c</sup>	—
116-B-10_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.080	— <sup>c</sup>	8.4	— <sup>c</sup>	—
116-B-10_Shallow	Rad	Eurpium-152	14683-23-9	pCi/g	0.053	— <sup>c</sup>	8.4	— <sup>c</sup>	—
116-B-10_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.56	— <sup>d</sup>	8.4	— <sup>d</sup>	—
116-B-10_Shallow	Rad	Uranium-238	U-238	pCi/g	0.71	— <sup>d</sup>	8.4	— <sup>d</sup>	—
116-B-11_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	231,428	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,226	6,000 <sup>d</sup>	86	6,000 <sup>d</sup>	No
116-B-11_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	11,745	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	5,251	1.34E+07	86	156,719	No
116-B-11_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	4,297	— <sup>f</sup>	86	— <sup>f</sup>	—
116-B-11_Deep	Rad	Americium-241	14596-10-2	pCi/g	5.1	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Cesium-137	10045-97-3	pCi/g	122	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	40	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Eurpium-152	14683-23-9	pCi/g	325	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Eurpium-154	15585-10-1	pCi/g	42	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Eurpium-155	14391-16-3	pCi/g	2.2	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Nickel-63	13981-37-8	pCi/g	2,702	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.76	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	19	— <sup>c</sup>	86	— <sup>c</sup>	—
116-B-11_Deep	Rad	Total beta radiostromium	SR-RAD	pCi/g	4.8	2,121	86	25	No
116-B-11_Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.6	— <sup>d</sup>	86	— <sup>d</sup>	—
116-B-11_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.069	— <sup>d</sup>	86	— <sup>d</sup>	—
116-B-11_Deep	Rad	Uranium-238	U-238	pCi/g	1.4	— <sup>d</sup>	86	— <sup>d</sup>	—
116-B-11_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	13,637	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,670	6,000 <sup>d</sup>	6.8	6,000 <sup>d</sup>	No
116-B-11_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,063	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	121	1.34E+07	6.8	1.98E+06	No
116-B-11_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	3,928	— <sup>f</sup>	6.8	— <sup>f</sup>	—
116-B-11_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.094	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.92	— <sup>c</sup>	6.8	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-11_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.28	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.9	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	22	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.069	— <sup>c</sup>	6.8	— <sup>c</sup>	—
116-B-11_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.34	2,121	6.8	312	No
116-B-11_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.3	— <sup>d</sup>	6.8	— <sup>d</sup>	—
116-B-11_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.057	— <sup>d</sup>	6.8	— <sup>d</sup>	—
116-B-11_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	— <sup>d</sup>	6.8	— <sup>d</sup>	—
116-B-12_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,800	— <sup>e</sup>	15	— <sup>e</sup>	—
116-B-12_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	860	6,000 <sup>f</sup>	15	6,000 <sup>f</sup>	No
116-B-12_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,700	— <sup>e</sup>	15	— <sup>e</sup>	—
116-B-12_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,048	— <sup>f</sup>	15	— <sup>f</sup>	—
116-B-12_Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.019	— <sup>e</sup>	15	— <sup>e</sup>	—
116-B-12_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	— <sup>d</sup>	15	— <sup>d</sup>	—
116-B-12_Deep	Rad	Uranium-238	U-238	pCi/g	0.69	— <sup>d</sup>	15	— <sup>d</sup>	—
116-B-12_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,900	— <sup>e</sup>	16	— <sup>e</sup>	—
116-B-12_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,600	— <sup>e</sup>	16	— <sup>e</sup>	—
116-B-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,884	— <sup>f</sup>	16	— <sup>f</sup>	—
116-B-12_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.034	— <sup>e</sup>	16	— <sup>e</sup>	—
116-B-12_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	— <sup>d</sup>	16	— <sup>d</sup>	—
116-B-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.024	— <sup>d</sup>	16	— <sup>d</sup>	—
116-B-12_Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	— <sup>d</sup>	16	— <sup>d</sup>	—
116-B-13_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	5,700	— <sup>e</sup>	25	— <sup>e</sup>	—
116-B-13_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	2,300	— <sup>e</sup>	25	— <sup>e</sup>	—
116-B-13_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	25	545,970	No
116-B-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,975	— <sup>f</sup>	25	— <sup>f</sup>	—
116-B-13_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.49	— <sup>e</sup>	25	— <sup>e</sup>	—
116-B-13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.049	— <sup>e</sup>	25	— <sup>e</sup>	—
116-B-13_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.043	— <sup>e</sup>	25	— <sup>e</sup>	—
116-B-13_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.41	2,121	25	86	No
116-B-13_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.1	— <sup>d</sup>	25	— <sup>d</sup>	—
116-B-13_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.055	— <sup>d</sup>	25	— <sup>d</sup>	—
116-B-13_Shallow	Rad	Uranium-238	U-238	pCi/g	0.99	— <sup>d</sup>	25	— <sup>d</sup>	—
116-B-14_Deep	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.92E+06	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	6,600	1.19E+07	3.6	3.30E+06	No
116-B-14_Deep	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	93,800	3.89E+08	3.6	1.08E+08	No
116-B-14_Deep	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	520	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	18,600	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,600	9.52E+06	3.6	2.64E+06	No
116-B-14_Deep	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,400	7.69E+06	3.6	2.14E+06	No
116-B-14_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	252	6,000 <sup>f</sup>	3.6	6,000 <sup>f</sup>	No
116-B-14_Deep	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.93E+07	2.92E+08	3.6	8.12E+07	No
116-B-14_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,300	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	307,000	3.89E+08	3.6	1.08E+08	No
116-B-14_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	18	1.34E+07	3.6	3.73E+06	No
116-B-14_Deep	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	17,900	3.89E+08	3.6	1.08E+08	No
116-B-14_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	3,095	— <sup>f</sup>	3.6	— <sup>f</sup>	—
116-B-14_Deep	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	39,600	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	42,300	3.89E+08	3.6	1.08E+08	No
116-B-14_Deep	Rad	Cesium-137	10045-97-3	pCi/g	5.9	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	Rad	Europium-152	14683-23-9	pCi/g	1.3	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.10	— <sup>e</sup>	3.6	— <sup>e</sup>	—
116-B-14_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.5	2,121	3.6	589	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCi}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-14_Deep	Rad	Uranium-234	13966-29-5	pCi/g	0.99	— <sup>a</sup>	3.6	— <sup>a</sup>	—
116-B-14_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.063	— <sup>a</sup>	3.6	— <sup>a</sup>	—
116-B-14_Deep	Rad	Uranium-238	U-238	pCi/g	1.0	— <sup>a</sup>	3.6	— <sup>a</sup>	—
116-B-14_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	33,600	— <sup>c</sup>	3.4	— <sup>c</sup>	—
116-B-14_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	297	6,000 <sup>a</sup>	3.4	6,000 <sup>a</sup>	No
116-B-14_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	20,000	— <sup>c</sup>	3.4	— <sup>c</sup>	—
116-B-14_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	30	1.34E+07	3.4	3.95E+06	No
116-B-14_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	4,346	— <sup>f</sup>	3.4	— <sup>f</sup>	—
116-B-14_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.26	— <sup>c</sup>	3.4	— <sup>c</sup>	—
116-B-14_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.96	— <sup>c</sup>	3.4	— <sup>c</sup>	—
116-B-14_Shallow	Rad	Europium-152	14683-23-9	pCi/g	4.4	— <sup>c</sup>	3.4	— <sup>c</sup>	—
116-B-14_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.37	— <sup>c</sup>	3.4	— <sup>c</sup>	—
116-B-14_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.6	2,121	3.4	624	No
116-B-14_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.5	— <sup>a</sup>	3.4	— <sup>a</sup>	—
116-B-14_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.061	— <sup>a</sup>	3.4	— <sup>a</sup>	—
116-B-14_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	— <sup>a</sup>	3.4	— <sup>a</sup>	—
116-B-15_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	6,800	10,000	18	559	Yes
116-B-15_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	89,000	3.89E+08	18	2.17E+07	No
116-B-15_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,400	— <sup>c</sup>	18	— <sup>c</sup>	—
116-B-15_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	9,300	— <sup>c</sup>	18	— <sup>c</sup>	—
116-B-15_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	500	9,013	18	504	No
116-B-15_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,983	— <sup>f</sup>	18	— <sup>f</sup>	—
116-B-15_Shallow_Focused	Rad	Nickel-63	13981-37-8	pCi/g	21	— <sup>c</sup>	18	— <sup>c</sup>	—
116-B-15_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.67	— <sup>a</sup>	18	— <sup>a</sup>	—
116-B-15_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.67	— <sup>a</sup>	18	— <sup>a</sup>	—
116-B-2_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,000	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,600	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,658	— <sup>f</sup>	15	— <sup>f</sup>	—
116-B-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.11	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	47	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.023	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	Rad	Europium-152	14683-23-9	pCi/g	0.60	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.59	— <sup>c</sup>	15	— <sup>c</sup>	—
116-B-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	2,121	15	142	No
116-B-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	— <sup>a</sup>	15	— <sup>a</sup>	—
116-B-2_Deep	Rad	Uranium-238	U-238	pCi/g	0.56	— <sup>a</sup>	15	— <sup>a</sup>	—
116-B-2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,300	— <sup>c</sup>	7.7	— <sup>c</sup>	—
116-B-2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,100	— <sup>c</sup>	7.7	— <sup>c</sup>	—
116-B-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,482	— <sup>f</sup>	7.7	— <sup>f</sup>	—
116-B-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.2	— <sup>c</sup>	7.7	— <sup>c</sup>	—
116-B-2_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.32	2,121	7.7	275	No
116-B-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	— <sup>a</sup>	7.7	— <sup>a</sup>	—
116-B-2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.50	— <sup>a</sup>	7.7	— <sup>a</sup>	—
116-B-3_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,400	— <sup>c</sup>	2.2	— <sup>c</sup>	—
116-B-3_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,900	— <sup>c</sup>	2.2	— <sup>c</sup>	—
116-B-3_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	2.2	6.10E+06	No
116-B-3_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,727	— <sup>f</sup>	2.2	— <sup>f</sup>	—
116-B-3_Deep	Rad	Cesium-137	10045-97-3	pCi/g	20	— <sup>c</sup>	2.2	— <sup>c</sup>	—
116-B-3_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.26	— <sup>c</sup>	2.2	— <sup>c</sup>	—
116-B-3_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	3.2	2,121	2.2	964	No
116-B-3_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.56	— <sup>a</sup>	2.2	— <sup>a</sup>	—
116-B-3_Deep	Rad	Uranium-238	U-238	pCi/g	0.58	— <sup>a</sup>	2.2	— <sup>a</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,800	— <sup>c</sup>	6.5	— <sup>c</sup>	—
116-B-3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,400	— <sup>c</sup>	6.5	— <sup>c</sup>	—
116-B-3_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	50	1.34E+07	6.5	2.07E+06	No
116-B-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,697	— <sup>f</sup>	6.5	— <sup>f</sup>	—
116-B-3_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.061	— <sup>c</sup>	6.5	— <sup>c</sup>	—
116-B-3_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.70	— <sup>g</sup>	6.5	— <sup>g</sup>	—
116-B-3_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.57	— <sup>g</sup>	6.5	— <sup>g</sup>	—
116-B-4_Deep	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	12	17,372	39	447	No
116-B-4_Deep	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.62E+06	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	6,701	1.19E+07	39	305,857	No
116-B-4_Deep	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	130	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,600	10,000	39	257	Yes
116-B-4_Deep	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	50,733	3.89E+08	39	1.00E+07	No
116-B-4_Deep	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	459	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	290	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	394	1,256	39	32	Yes
116-B-4_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	92,716	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,845	9.52E+06	39	244,685	No
116-B-4_Deep	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	21,616	7.69E+06	39	197,677	No
116-B-4_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	423	6,000 <sup>h</sup>	39	6,000 <sup>h</sup>	No
116-B-4_Deep	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.30E+07	2.92E+08	39	7.52E+06	Yes
116-B-4_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	94,296	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	206,278	3.89E+08	39	1.00E+07	No
116-B-4_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	440	1.34E+07	39	345,266	No
116-B-4_Deep	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	8.0	14	39	0.35	Yes
116-B-4_Deep	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	6,185	3.89E+08	39	1.00E+07	No
116-B-4_Deep	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	720	27,530	39	708	Yes
116-B-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,643	— <sup>f</sup>	39	— <sup>f</sup>	—
116-B-4_Deep	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,083	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	43,911	3.89E+08	39	1.00E+07	No
116-B-4_Deep	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.070	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	112	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	18	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	195	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	45	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	Rad	Europium-155	14391-16-3	$\text{pCi}/\text{g}$	1.3	— <sup>c</sup>	39	— <sup>c</sup>	—
116-B-4_Deep	Rad	Niobium-94	14681-63-1	$\text{pCi}/\text{g}$	0.34	— <sup>h</sup>	39	— <sup>h</sup>	—
116-B-4_Deep	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.51	— <sup>g</sup>	39	— <sup>g</sup>	—
116-B-4_Deep	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.55	— <sup>g</sup>	39	— <sup>g</sup>	—
116-B-4_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,900	— <sup>c</sup>	10	— <sup>c</sup>	—
116-B-4_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,800	— <sup>c</sup>	10	— <sup>c</sup>	—
116-B-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,881	— <sup>f</sup>	10	— <sup>f</sup>	—
116-B-4_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.049	— <sup>c</sup>	10	— <sup>c</sup>	—
116-B-4_Shallow	Rad	Plutonium-238	13981-16-3	$\text{pCi}/\text{g}$	0.37	— <sup>c</sup>	10	— <sup>c</sup>	—
116-B-4_Shallow	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.35	— <sup>c</sup>	10	— <sup>c</sup>	—
116-B-4_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.59	— <sup>g</sup>	10	— <sup>g</sup>	—
116-B-4_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.63	— <sup>g</sup>	10	— <sup>g</sup>	—
116-B-5_Deep_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	2,800	1.34E+07	19	725,992	No
116-B-5_Deep_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.29	— <sup>c</sup>	19	— <sup>c</sup>	—
116-B-5_Deep_Focused	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.94	— <sup>c</sup>	19	— <sup>c</sup>	—
116-B-5_Deep_Focused	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	10.0	— <sup>c</sup>	19	— <sup>c</sup>	—
116-B-5_Deep_Focused	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	0.88	— <sup>c</sup>	19	— <sup>c</sup>	—
116-B-5_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	300,000	3.89E+08	38	1.03E+07	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCi}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-5_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	16,000	1.34E+07	38	357,204	No
116-B-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	1.8	— <sup>c</sup>	38	— <sup>c</sup>	—
116-B-5_Shallow_Focused	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	1.0	— <sup>c</sup>	38	— <sup>c</sup>	—
116-B-5_Shallow_Focused	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	7.3	— <sup>c</sup>	38	— <sup>c</sup>	—
116-B-5_Shallow_Focused	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	0.67	— <sup>c</sup>	38	— <sup>c</sup>	—
116-B-5_Shallow_Focused	Rad	Tritium	10028-17-8	$\text{pCi}/\text{g}$	680	60	38	1.6	Yes
116-B-6A_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	7,100	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-6A_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,900	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-6A_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,735	— <sup>f</sup>	11	— <sup>f</sup>	—
116-B-6A_Deep	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-6A_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	2.0	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-6A_Deep	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	2.8	— <sup>c</sup>	11	— <sup>c</sup>	—
116-B-6A_Deep	Rad	Total beta radiostromium	SR-RAD	$\text{pCi}/\text{g}$	21	2,121	11	193	No
116-B-6A_Deep	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.55	— <sup>e</sup>	11	— <sup>e</sup>	—
116-B-6A_Deep	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.042	— <sup>e</sup>	11	— <sup>e</sup>	—
116-B-6A_Deep	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.58	— <sup>e</sup>	11	— <sup>e</sup>	—
116-B-6A_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,700	— <sup>c</sup>	7.9	— <sup>c</sup>	—
116-B-6A_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	11,100	— <sup>c</sup>	7.9	— <sup>c</sup>	—
116-B-6A_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	7.9	1.70E+06	No
116-B-6A_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,779	— <sup>f</sup>	7.9	— <sup>f</sup>	—
116-B-6A_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	6.4	— <sup>c</sup>	7.9	— <sup>c</sup>	—
116-B-6A_Shallow	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.23	— <sup>c</sup>	7.9	— <sup>c</sup>	—
116-B-6A_Shallow	Rad	Total beta radiostromium	SR-RAD	$\text{pCi}/\text{g}$	3.3	2,121	7.9	268	No
116-B-6A_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	1.4	— <sup>e</sup>	7.9	— <sup>e</sup>	—
116-B-6A_Shallow	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.28	— <sup>e</sup>	7.9	— <sup>e</sup>	—
116-B-6A_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.55	— <sup>e</sup>	7.9	— <sup>e</sup>	—
116-B-6B_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,500	— <sup>c</sup>	8.6	— <sup>c</sup>	—
116-B-6B_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,900	— <sup>c</sup>	8.6	— <sup>c</sup>	—
116-B-6B_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	40	1.34E+07	8.6	1.56E+06	No
116-B-6B_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,917	— <sup>f</sup>	8.6	— <sup>f</sup>	—
116-B-6B_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.030	— <sup>c</sup>	8.6	— <sup>c</sup>	—
116-B-6B_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.59	— <sup>e</sup>	8.6	— <sup>e</sup>	—
116-B-6B_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.64	— <sup>e</sup>	8.6	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	25,200	— <sup>c</sup>	13	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	2,100	6,000 <sup>d</sup>	13	6,000 <sup>d</sup>	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,800	— <sup>c</sup>	13	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	750	1.34E+07	13	1.06E+06	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,525	— <sup>f</sup>	13	— <sup>f</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	3.5	— <sup>c</sup>	13	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.18	— <sup>c</sup>	13	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	1.4	— <sup>c</sup>	13	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	3.3	— <sup>c</sup>	13	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Total beta radiostromium	SR-RAD	$\text{pCi}/\text{g}$	0.40	2,121	13	167	No
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.93	— <sup>e</sup>	13	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.053	— <sup>e</sup>	13	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.84	— <sup>e</sup>	13	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	19,087	— <sup>c</sup>	21	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	688	6,000 <sup>d</sup>	21	6,000 <sup>d</sup>	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,194	— <sup>c</sup>	21	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	63	1.34E+07	21	642,625	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,072	— <sup>f</sup>	21	— <sup>f</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.34	— <sup>c</sup>	21	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.25	— <sup>c</sup>	21	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.9	— <sup>c</sup>	21	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.22	— <sup>c</sup>	21	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	3.6	— <sup>c</sup>	21	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.75	— <sup>d</sup>	21	— <sup>d</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.050	— <sup>d</sup>	21	— <sup>d</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.69	— <sup>d</sup>	21	— <sup>d</sup>	—
116-B-9_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	13,200	— <sup>e</sup>	7.1	— <sup>e</sup>	—
116-B-9_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	12,000	— <sup>e</sup>	7.1	— <sup>e</sup>	—
116-B-9_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	390	1.34E+07	7.1	1.89E+06	No
116-B-9_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,372	— <sup>f</sup>	7.1	— <sup>f</sup>	—
116-B-9_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.44	— <sup>d</sup>	7.1	— <sup>d</sup>	—
116-B-9_Shallow	Rad	Uranium-238	U-238	pCi/g	0.46	— <sup>d</sup>	7.1	— <sup>d</sup>	—
116-C-1_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	66,667	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	497	6,000 <sup>g</sup>	58	6,000 <sup>g</sup>	No
116-C-1_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	21,737	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	2,275	1.34E+07	58	233,580	No
116-C-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	34,266	— <sup>f</sup>	58	— <sup>f</sup>	—
116-C-1_Deep	Rad	Americium-241	14596-10-2	pCi/g	25	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1,484	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	62	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Europium-152	14683-23-9	pCi/g	412	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Europium-154	15585-10-1	pCi/g	28	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Europium-155	14391-16-3	pCi/g	1.6	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Nickel-63	13981-37-8	pCi/g	634	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.94	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	46	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	64	2,121	58	37	Yes
116-C-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.55	— <sup>d</sup>	58	— <sup>d</sup>	—
116-C-1_Deep	Rad	Uranium-234	13966-29-5	pCi/g	5.1	— <sup>d</sup>	58	— <sup>d</sup>	—
116-C-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.063	— <sup>d</sup>	58	— <sup>d</sup>	—
116-C-1_Deep	Rad	Uranium-238	U-238	pCi/g	6.1	— <sup>d</sup>	58	— <sup>d</sup>	—
116-C-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	9,69E+06	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	2,600	1.19E+07	58	206,919	No
116-C-1_Deep_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	77,800	3.89E+08	58	6.77E+06	No
116-C-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	530	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	2,900	1,256	58	22	Yes
116-C-1_Deep_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	148,000	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,000	9.52E+06	58	165,535	No
116-C-1_Deep_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	30,400	7.69E+06	58	133,733	No
116-C-1_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,800	6,000 <sup>g</sup>	58	6,000 <sup>g</sup>	No
116-C-1_Deep_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,31E+07	2.92E+08	58	5.09E+06	Yes
116-C-1_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	48,500	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	296,000	3.89E+08	58	6.77E+06	No
116-C-1_Deep_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	11,800	1.34E+07	58	233,580	No
116-C-1_Deep_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	18,600	3.89E+08	58	6.77E+06	No
116-C-1_Deep_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	890	27,530	58	479	Yes
116-C-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,977	— <sup>f</sup>	58	— <sup>f</sup>	—
116-C-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	38,600	— <sup>e</sup>	58	— <sup>e</sup>	—
116-C-1_Deep_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	464,000	3.89E+08	58	6.77E+06	No
116-C-1_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	83	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	5,690	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	115	— <sup>c</sup>	58	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-C-1_Deep_Focused	Rad	Europium-152	14683-23-9	pCi/g	1,120	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Europium-154	15585-10-1	pCi/g	144	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Nickel-63	13981-37-8	pCi/g	1,590	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	4.0	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	136	— <sup>c</sup>	58	— <sup>c</sup>	—
116-C-1_Deep_Focused	Rad	Total beta radiostromtrium	SR-RAD	pCi/g	88	2,121	58	37	Yes
116-C-1_Deep_Focused	Rad	Uranium-234	13966-29-5	pCi/g	0.19	— <sup>d</sup>	58	— <sup>d</sup>	—
116-C-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	1.0	— <sup>d</sup>	58	— <sup>d</sup>	—
116-C-1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,664	— <sup>c</sup>	12	— <sup>c</sup>	—
116-C-1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,420	— <sup>c</sup>	12	— <sup>c</sup>	—
116-C-1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	30	1.34E+07	12	1.09E+06	No
116-C-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,357	— <sup>f</sup>	12	— <sup>f</sup>	—
116-C-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.83	— <sup>c</sup>	12	— <sup>c</sup>	—
116-C-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.074	— <sup>c</sup>	12	— <sup>c</sup>	—
116-C-1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.6	— <sup>c</sup>	12	— <sup>c</sup>	—
116-C-1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.22	— <sup>c</sup>	12	— <sup>c</sup>	—
116-C-1_Shallow	Rad	Total beta radiostromtrium	SR-RAD	pCi/g	0.20	2,121	12	172	No
116-C-1_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	0.82	— <sup>d</sup>	12	— <sup>d</sup>	—
116-C-1_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.045	— <sup>d</sup>	12	— <sup>d</sup>	—
116-C-1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.79	— <sup>d</sup>	12	— <sup>d</sup>	—
116-C-2A_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	29,500	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	848	6,000 <sup>g</sup>	14	6,000 <sup>g</sup>	No
116-C-2A_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	14,000	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	150	1.34E+07	14	945,835	No
116-C-2A_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,428	— <sup>f</sup>	14	— <sup>f</sup>	—
116-C-2A_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.71	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Cesium-137	10045-97-3	pCi/g	23	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	12	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Europium-152	14683-23-9	pCi/g	30	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Europium-154	15585-10-1	pCi/g	3.3	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Nickel-63	13981-37-8	pCi/g	540	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.15	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	1.5	— <sup>c</sup>	14	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Total beta radiostromtrium	SR-RAD	pCi/g	6.2	2,121	14	149	No
116-C-2A_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.45	— <sup>d</sup>	14	— <sup>d</sup>	—
116-C-2A_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.036	— <sup>d</sup>	14	— <sup>d</sup>	—
116-C-2A_Deep	Rad	Uranium-238	U-238	pCi/g	0.48	— <sup>d</sup>	14	— <sup>d</sup>	—
116-C-2A_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,262	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,600	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	120	1.34E+07	9.8	1.37E+06	No
116-C-2A_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,378	— <sup>f</sup>	9.8	— <sup>f</sup>	—
116-C-2A_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.43	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.23	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.26	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	4.7	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.10	— <sup>c</sup>	9.8	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Total beta radiostromtrium	SR-RAD	pCi/g	1.9	2,121	9.8	216	No
116-C-2A_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.50	— <sup>d</sup>	9.8	— <sup>d</sup>	—
116-C-2A_Shallow	Rad	Uranium-238	U-238	pCi/g	0.46	— <sup>d</sup>	9.8	— <sup>d</sup>	—
116-C-3_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	9.19E+06	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,080	1.19E+07	5.0	2.38E+06	No
116-C-3_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,112	10,000	5.0	2,000	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCi}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-C-3_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	106,052	3.89E+08	5.0	7.78E+07	No
116-C-3_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	725	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	7,239	348,488	5.0	69,698	No
116-C-3_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	204	1,256	5.0	251	No
116-C-3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,457	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,387	9.52E+06	5.0	1.90E+06	No
116-C-3_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,592	7.69E+06	5.0	1.54E+06	No
116-C-3_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,430	6,000 <sup>d</sup>	5.0	6,000 <sup>d</sup>	No
116-C-3_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1,92E+07	2.92E+08	5.0	5.85E+07	No
116-C-3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,129	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	321,076	3.89E+08	5.0	7.78E+07	No
116-C-3_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	15,662	3.89E+08	5.0	7.78E+07	No
116-C-3_Shallow	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	$\mu\text{g}/\text{kg}$	1,430	23,943	5.0	4,789	No
116-C-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,278	— <sup>f</sup>	5.0	— <sup>f</sup>	—
116-C-3_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	38,808	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	48,655	3.89E+08	5.0	7.78E+07	No
116-C-3_Shallow	Rad	Carbon-14	14762-75-5	pCi/g	42	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.86	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.15	— <sup>c</sup>	5.0	— <sup>c</sup>	—
116-C-3_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.64	2,121	5.0	424	No
116-C-3_Shallow	Rad	Tritium	10028-17-8	pCi/g	7.2	60	5.0	12	No
116-C-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.80	— <sup>e</sup>	5.0	— <sup>e</sup>	—
116-C-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.77	— <sup>e</sup>	5.0	— <sup>e</sup>	—
116-C-3_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.15E+07	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	6,400	10,000	4.6	2,174	Yes
116-C-3_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	196,000	3.89E+08	4.6	8.46E+07	No
116-C-3_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	710	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	24,300	348,488	4.6	75,758	No
116-C-3_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	360	1,256	4.6	273	Yes
116-C-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	26,400	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,700	9.52E+06	4.6	2.07E+06	No
116-C-3_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,400	7.69E+06	4.6	1.67E+06	No
116-C-3_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,500	6,000 <sup>d</sup>	4.6	6,000 <sup>d</sup>	No
116-C-3_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.99E+07	2.92E+08	4.6	6.36E+07	No
116-C-3_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	9,100	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	346,000	3.89E+08	4.6	8.46E+07	No
116-C-3_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,100	563,885	4.6	122,584	No
116-C-3_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	18,200	3.89E+08	4.6	8.46E+07	No
116-C-3_Shallow_Focused	non-Rad	Nitrate	14797-55-8	$\mu\text{g}/\text{kg}$	12,400	107,743	4.6	23,422	No
116-C-3_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	$\mu\text{g}/\text{kg}$	480	23,943	4.6	5,205	No
116-C-3_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	270	27,530	4.6	5,985	No
116-C-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,560	— <sup>f</sup>	4.6	— <sup>f</sup>	—
116-C-3_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	42,400	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	51,400	3.89E+08	4.6	8.46E+07	No
116-C-3_Shallow_Focused	Rad	Americium-241	14596-10-2	pCi/g	0.27	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	14	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.91	— <sup>c</sup>	4.6	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	18	2,121	4.6	461	No
116-C-3_Shallow_Focused	Rad	Tritium	10028-17-8	pCi/g	4.0	60	4.6	13	No
116-C-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.90	— <sup>e</sup>	4.6	— <sup>e</sup>	—
116-C-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.042	— <sup>e</sup>	4.6	— <sup>e</sup>	—
116-C-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.86	— <sup>e</sup>	4.6	— <sup>e</sup>	—
116-C-5_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	41,332	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,290	6,000 <sup>d</sup>	93	6,000 <sup>d</sup>	No
116-C-5_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	20,715	— <sup>c</sup>	93	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
116-C-5_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	2,436	1.34E+07	93	144,263	No
116-C-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,838	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	2.2	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	52	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	18	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	73	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	16	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Europium-155	14391-16-3	$\text{pCi}/\text{g}$	0.48	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	644	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Plutonium-238	13981-16-3	$\text{pCi}/\text{g}$	0.14	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	4.6	— <sup>c</sup>	93	— <sup>c</sup>	—
116-C-5_Deep	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	4.4	2,121	93	23	No
116-C-5_Deep	Rad	Uranium-234	13966-29-5	$\text{pCi}/\text{g}$	1.0	— <sup>d</sup>	93	— <sup>d</sup>	—
116-C-5_Deep	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.048	— <sup>d</sup>	93	— <sup>d</sup>	—
116-C-5_Deep	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.95	— <sup>d</sup>	93	— <sup>d</sup>	—
116-C-5_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,609	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	239	6,000 <sup>d</sup>	10	6,000 <sup>d</sup>	No
116-C-5_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,017	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	32	1.34E+07	10	1.29E+06	No
116-C-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,773	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.39	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	1.2	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.15	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	1.5	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	0.32	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	7.8	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.20	— <sup>c</sup>	10	— <sup>c</sup>	—
116-C-5_Shallow	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	0.39	2,121	10	204	No
116-C-5_Shallow	Rad	Uranium-234	13966-29-5	$\text{pCi}/\text{g}$	0.84	— <sup>d</sup>	10	— <sup>d</sup>	—
116-C-5_Shallow	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.039	— <sup>d</sup>	10	— <sup>d</sup>	—
116-C-5_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.93	— <sup>d</sup>	10	— <sup>d</sup>	—
116-C-6_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,400	10,000	2.4	4,167	No
116-C-6_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	44,700	3.89E+08	2.4	1.62E+08	No
116-C-6_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	6,700	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,300	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,557	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	0.64	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	1.9	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.25	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	5.4	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.53	— <sup>c</sup>	2.4	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	0.46	2,121	2.4	884	No
116-C-6_Shallow_Focused	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.54	— <sup>d</sup>	2.4	— <sup>d</sup>	—
116-C-6_Shallow_Focused	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.041	— <sup>d</sup>	2.4	— <sup>d</sup>	—
116-C-6_Shallow_Focused	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.52	— <sup>d</sup>	2.4	— <sup>d</sup>	—
118-B-1_Shallow_1	non-Rad	4-Methyl-2-pentanone	108-10-1	$\mu\text{g}/\text{kg}$	8.0	1,783	37	48	No
118-B-1_Shallow_1	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	23	17,372	37	465	No
118-B-1_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.60E+06	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,100	10,000	37	267	Yes
118-B-1_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	63,100	3.89E+08	37	1.04E+07	No
118-B-1_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	660	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	non-Rad	Bis[2-ethylhexyl] phthalate	117-81-7	$\mu\text{g}/\text{kg}$	240	— <sup>c</sup>	37	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-1_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,900	348,488	37	9,318	No
118-B-1_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,200	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	10,700	9.52E+06	37	254,499	No
118-B-1_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	17,900	7.69E+06	37	205,605	No
118-B-1_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	19	88,471	37	2,366	No
118-B-1_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.41E+07	2.92E+08	37	7.82E+06	Yes
118-B-1_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	4,900	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	411,000	3.89E+08	37	1.04E+07	No
118-B-1_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	20	1.34E+07	37	359,114	No
118-B-1_Shallow_1	non-Rad	Methylene chloride	75-09-2	µg/kg	15	14	37	0.36	Yes
118-B-1_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	12,900	3.89E+08	37	1.04E+07	No
118-B-1_Shallow_1	non-Rad	Total U isotopes	Total U isotopes	µg/kg	1,703	— <sup>f</sup>	37	— <sup>f</sup>	—
118-B-1_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	51,900	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	49,100	3.89E+08	37	1.04E+07	No
118-B-1_Shallow_1	Rad	Carbon-14	14762-75-5	pCi/g	3.4	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.31	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	Rad	Europium-152	14683-23-9	pCi/g	1.2	— <sup>c</sup>	37	— <sup>c</sup>	—
118-B-1_Shallow_1	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.28	2,121	37	57	No
118-B-1_Shallow_1	Rad	Tritium	10028-17-8	pCi/g	239	60	37	1.6	Yes
118-B-1_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	— <sup>g</sup>	37	— <sup>g</sup>	—
118-B-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.57	— <sup>g</sup>	37	— <sup>g</sup>	—
118-B-1_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	5.17E+06	— <sup>c</sup>	6.1	— <sup>c</sup>	—
118-B-1_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,200	10,000	6.1	1,639	Yes
118-B-1_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	61,000	3.89E+08	6.1	6.38E+07	No
118-B-1_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	650	— <sup>c</sup>	6.1	— <sup>c</sup>	—
118-B-1_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	5,500	348,488	6.1	57,129	No
118-B-1_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,900	— <sup>c</sup>	6.1	— <sup>c</sup>	—
118-B-1_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	8,400	9.52E+06	6.1	1.56E+06	No
118-B-1_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	16,800	7.69E+06	6.1	1.26E+06	No
118-B-1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	330	6,000 <sup>h</sup>	6.1	6,000 <sup>h</sup>	No
118-B-1_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.18E+07	2.92E+08	6.1	4.79E+07	No
118-B-1_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	5,000	— <sup>c</sup>	6.1	— <sup>c</sup>	—
118-B-1_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	329,000	3.89E+08	6.1	6.38E+07	No
118-B-1_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	11,000	3.89E+08	6.1	6.38E+07	No
118-B-1_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	54,700	— <sup>c</sup>	6.1	— <sup>c</sup>	—
118-B-1_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	43,300	3.89E+08	6.1	6.38E+07	No
118-B-1_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.22	— <sup>c</sup>	6.1	— <sup>c</sup>	—
118-B-1_Shallow_2	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.25	2,121	6.1	348	No
118-B-1_Shallow_2	Rad	Tritium	10028-17-8	pCi/g	60	60	6.1	9.8	Yes
118-B-1_Shallow_3	non-Rad	4-Methyl-2-pentanone	108-10-1	µg/kg	6.0	1,783	9.8	182	No
118-B-1_Shallow_3	non-Rad	Acetone	67-64-1	µg/kg	16	17,372	9.8	1,773	No
118-B-1_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	6.12E+06	— <sup>c</sup>	9.8	— <sup>c</sup>	—
118-B-1_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	4,500	10,000	9.8	1,020	Yes
118-B-1_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	65,900	3.89E+08	9.8	3.97E+07	No
118-B-1_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	650	— <sup>c</sup>	9.8	— <sup>c</sup>	—
118-B-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	39	— <sup>c</sup>	9.8	— <sup>c</sup>	—
118-B-1_Shallow_3	non-Rad	Boron	7440-42-8	µg/kg	8,900	348,488	9.8	35,560	No
118-B-1_Shallow_3	non-Rad	Carbon tetrachloride	56-23-5	µg/kg	11	5.0	9.8	0.51	Yes
118-B-1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	9,200	— <sup>c</sup>	9.8	— <sup>c</sup>	—
118-B-1_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	9,100	9.52E+06	9.8	971,251	No
118-B-1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	18,000	7.69E+06	9.8	784,655	No
118-B-1_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	54	88,471	9.8	9,028	No
118-B-1_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	210	6,000 <sup>h</sup>	9.8	6,000 <sup>h</sup>	No
118-B-1_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.21E+07	2.92E+08	9.8	2.98E+07	No
118-B-1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	6,600	— <sup>c</sup>	9.8	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP ID 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-1_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	390,000	3.89E+08	9.8	3.97E+07	No
118-B-1_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	300	1.34E+07	9.8	1.37E+06	No
118-B-1_Shallow_3	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	26	14	9.8	1.4	Yes
118-B-1_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	19,000	3.89E+08	9.8	3.97E+07	No
118-B-1_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	49,200	- <sup>c</sup>	9.8	- <sup>c</sup>	-
118-B-1_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	44,300	3.89E+08	9.8	3.97E+07	No
118-B-1_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	1.5	- <sup>c</sup>	9.8	- <sup>c</sup>	-
118-B-1_Shallow_3	Rad	Total beta radiostrontium	SR-RAD	pCi/g	4.4	2,121	9.8	216	No
118-B-1_Shallow_3	Rad	Tritium	10028-17-8	pCi/g	19	60	9.8	6.1	Yes
118-B-1_Shallow_4	non-Rad	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	$\mu\text{g}/\text{kg}$	13	400	17	23	No
118-B-1_Shallow_4	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	$\mu\text{g}/\text{kg}$	19	705	17	41	No
118-B-1_Shallow_4	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	16	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	19	17,372	17	1,010	No
118-B-1_Shallow_4	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5,27E+06	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	80	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,900	10,000	17	581	Yes
118-B-1_Shallow_4	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	51,400	3.89E+08	17	2.26E+07	No
118-B-1_Shallow_4	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	420	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	7.8	3.8	17	0.22	Yes
118-B-1_Shallow_4	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	600	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,900	348,488	17	20,261	No
118-B-1_Shallow_4	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	17	5.0	17	0.29	Yes
118-B-1_Shallow_4	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	2.5	1.42E+06	17	82,619	No
118-B-1_Shallow_4	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	6,700	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,600	9.52E+06	17	553,387	No
118-B-1_Shallow_4	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,500	7.69E+06	17	447,071	No
118-B-1_Shallow_4	non-Rad	Dalapon	75-99-0	$\mu\text{g}/\text{kg}$	48	499	17	29	Yes
118-B-1_Shallow_4	non-Rad	Dieldrin	60-57-1	$\mu\text{g}/\text{kg}$	3.8	166	17	9.7	No
118-B-1_Shallow_4	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	17	63,829	17	3,711	No
118-B-1_Shallow_4	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	63	88,471	17	5,144	No
118-B-1_Shallow_4	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	1.5	1,219	17	71	No
118-B-1_Shallow_4	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	300	6,000 <sup>d</sup>	17	6,000 <sup>d</sup>	No
118-B-1_Shallow_4	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.23E+07	2.92E+08	17	1.70E+07	Yes
118-B-1_Shallow_4	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,500	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	336,000	3.89E+08	17	2.26E+07	No
118-B-1_Shallow_4	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	12	14	17	0.79	Yes
118-B-1_Shallow_4	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,300	3.89E+08	17	2.26E+07	No
118-B-1_Shallow_4	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	26	7,909	17	460	No
118-B-1_Shallow_4	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,400	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_4	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	42,400	3.89E+08	17	2.26E+07	No
118-B-1_Shallow_4	Rad	Cesium-137	10045-97-3	pCi/g	0.74	- <sup>c</sup>	17	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	19	17,372	33	525	No
118-B-1_Shallow_5	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	3.99E+06	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,900	10,000	33	302	Yes
118-B-1_Shallow_5	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	44,400	3.89E+08	33	1.18E+07	No
118-B-1_Shallow_5	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	140	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	58	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,200	348,488	33	10,528	No
118-B-1_Shallow_5	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	230	1,256	33	38	Yes
118-B-1_Shallow_5	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	5,000	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,900	9.52E+06	33	287,561	No
118-B-1_Shallow_5	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	14,300	7.69E+06	33	232,315	No
118-B-1_Shallow_5	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	260	6,000 <sup>d</sup>	33	6,000 <sup>d</sup>	No
118-B-1_Shallow_5	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.67E+07	2.92E+08	33	8.83E+06	Yes
118-B-1_Shallow_5	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,200	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	302,000	3.89E+08	33	1.18E+07	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-1_Shallow_5	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	40	1.34E+07	33	405,766	No
118-B-1_Shallow_5	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	13	14	33	0.41	Yes
118-B-1_Shallow_5	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	7,400	3.89E+08	33	1.18E+07	No
118-B-1_Shallow_5	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	34,700	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	38,600	3.89E+08	33	1.18E+07	No
118-B-1_Shallow_5	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	3.6	- <sup>c</sup>	33	- <sup>c</sup>	-
118-B-1_Shallow_5	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	2.4	2,121	33	64	No
118-B-1_Shallow_6	non-Rad	2,4,5-TP[2-(2,4,5-Trichlorophenoxy)propionic acid]Silvex	93-72-1	$\mu\text{g}/\text{kg}$	12	415	8.6	48	No
118-B-1_Shallow_6	non-Rad	2,4-D[2,4-Dichlorophenoxyacetic acid]	94-75-7	$\mu\text{g}/\text{kg}$	62	400	8.6	47	Yes
118-B-1_Shallow_6	non-Rad	2,4-DB[4-(2,4-Dichlorophenoxy)butanoic acid]	94-82-6	$\mu\text{g}/\text{kg}$	43	705	8.6	82	No
118-B-1_Shallow_6	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	8.0	17,372	8.6	2,020	No
118-B-1_Shallow_6	non-Rad	Aldrin	309-00-2	$\mu\text{g}/\text{kg}$	0.50	9,878	8.6	1,149	No
118-B-1_Shallow_6	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.27E+06	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,500	10,000	8.6	1,163	Yes
118-B-1_Shallow_6	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	96,400	3.89E+08	8.6	4.52E+07	No
118-B-1_Shallow_6	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	360	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Bis[2-ethylhexyl] phthalate	117-81-7	$\mu\text{g}/\text{kg}$	430	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	8,800	348,488	8.6	40,522	No
118-B-1_Shallow_6	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	24	60,438	8.6	7,028	No
118-B-1_Shallow_6	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	7.0	5.0	8.6	0.58	Yes
118-B-1_Shallow_6	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	7,400	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,500	9.52E+06	8.6	1.11E+06	No
118-B-1_Shallow_6	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,900	7.69E+06	8.6	894,142	No
118-B-1_Shallow_6	non-Rad	Dalapon	75-99-0	$\mu\text{g}/\text{kg}$	38	499	8.6	58	No
118-B-1_Shallow_6	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	84	88,471	8.6	10,287	No
118-B-1_Shallow_6	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	280	6,000 <sup>b</sup>	8.6	6,000 <sup>b</sup>	No
118-B-1_Shallow_6	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.21E+07	2.92E+08	8.6	3.40E+07	No
118-B-1_Shallow_6	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,100	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	322,000	3.89E+08	8.6	4.52E+07	No
118-B-1_Shallow_6	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	8.6	1.56E+06	No
118-B-1_Shallow_6	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	10	14	8.6	1.6	Yes
118-B-1_Shallow_6	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,500	3.89E+08	8.6	4.52E+07	No
118-B-1_Shallow_6	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	23	7,909	8.6	920	No
118-B-1_Shallow_6	non-Rad	Total U_isotopes	Total_U_isotopes	$\mu\text{g}/\text{kg}$	2,250	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	49,100	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	41,200	3.89E+08	8.6	4.52E+07	No
118-B-1_Shallow_6	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.16	- <sup>c</sup>	8.6	- <sup>c</sup>	-
118-B-1_Shallow_6	Rad	Tritium	10028-17-8	$\text{pCi}/\text{g}$	5.0	60	8.6	6.9	No
118-B-1_Shallow_6	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.61	- <sup>a</sup>	8.6	- <sup>a</sup>	-
118-B-1_Shallow_6	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.76	- <sup>a</sup>	8.6	- <sup>a</sup>	-
118-B-1_Shallow_7	non-Rad	2,4-D[2,4-Dichlorophenoxyacetic acid]	94-75-7	$\mu\text{g}/\text{kg}$	26	400	55	7.3	Yes
118-B-1_Shallow_7	non-Rad	2,4-DB[4-(2,4-Dichlorophenoxy)butanoic acid]	94-82-6	$\mu\text{g}/\text{kg}$	27	705	55	13	Yes
118-B-1_Shallow_7	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	26	2,896	55	53	No
118-B-1_Shallow_7	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	15	- <sup>c</sup>	55	- <sup>c</sup>	-
118-B-1_Shallow_7	non-Rad	4-Amino-3,5,6-trichloropolonic acid	1918-02-1	$\mu\text{g}/\text{kg}$	14	1,806	55	33	No
118-B-1_Shallow_7	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	10	17,372	55	316	No
118-B-1_Shallow_7	non-Rad	Alpha-Chlordane	5103-71-9	$\mu\text{g}/\text{kg}$	12	1.42E+06	55	25,837	No
118-B-1_Shallow_7	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.09E+06	- <sup>c</sup>	55	- <sup>c</sup>	-
118-B-1_Shallow_7	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,800	10,000	55	182	Yes
118-B-1_Shallow_7	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	145,000	3.89E+08	55	7.07E+06	No
118-B-1_Shallow_7	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	310	- <sup>c</sup>	55	- <sup>c</sup>	-
118-B-1_Shallow_7	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	18,100	348,488	55	6,336	Yes
118-B-1_Shallow_7	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	10	5.0	55	0.091	Yes
118-B-1_Shallow_7	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,500	- <sup>c</sup>	55	- <sup>c</sup>	-
118-B-1_Shallow_7	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,600	9.52E+06	55	173,059	No
118-B-1_Shallow_7	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	25,700	7.69E+06	55	139,811	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-1_Shallow_7	non-Rad	Dalapon	75-99-0	$\mu\text{g}/\text{kg}$	32	499	55	9.1	Yes
118-B-1_Shallow_7	non-Rad	Dicamba	1918-00-9	$\mu\text{g}/\text{kg}$	13	1,582	55	29	No
118-B-1_Shallow_7	non-Rad	Dieldrin	60-57-1	$\mu\text{g}/\text{kg}$	1.7	166	55	3.0	No
118-B-1_Shallow_7	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	25	63,829	55	1,161	No
118-B-1_Shallow_7	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	300	6,000 <sup>a</sup>	55	6,000 <sup>a</sup>	No
118-B-1_Shallow_7	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.87E+07	2.92E+08	55	5.32E+06	Yes
118-B-1_Shallow_7	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	12,900	— <sup>c</sup>	55	— <sup>c</sup>	—
118-B-1_Shallow_7	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	340,000	3.89E+08	55	7.07E+06	No
118-B-1_Shallow_7	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	55	244,197	No
118-B-1_Shallow_7	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	9.1	— <sup>c</sup>	55	— <sup>c</sup>	—
118-B-1_Shallow_7	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	10	14	55	0.25	Yes
118-B-1_Shallow_7	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	2,100	563,885	55	10,252	No
118-B-1_Shallow_7	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	19	6,798	55	124	No
118-B-1_Shallow_7	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,700	3.89E+08	55	7.07E+06	No
118-B-1_Shallow_7	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,170	— <sup>f</sup>	55	— <sup>f</sup>	—
118-B-1_Shallow_7	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	40,900	— <sup>c</sup>	55	— <sup>c</sup>	—
118-B-1_Shallow_7	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	48,700	3.89E+08	55	7.07E+06	No
118-B-1_Shallow_7	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.58	— <sup>c</sup>	55	— <sup>c</sup>	—
118-B-1_Shallow_7	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.10	— <sup>c</sup>	55	— <sup>c</sup>	—
118-B-1_Shallow_7	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.72	— <sup>e</sup>	55	— <sup>e</sup>	—
118-B-1_Shallow_7	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.73	— <sup>e</sup>	55	— <sup>e</sup>	—
118-B-1_Shallow_Focused	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	99	17,372	251	69	Yes
118-B-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	1.01E+07	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	7,000	10,000	251	40	Yes
118-B-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	261,000	3.89E+08	251	1.55E+06	No
118-B-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	580	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	38	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	24,500	348,488	251	1,389	Yes
118-B-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	280	1,256	251	5.0	Yes
118-B-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	16,400	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	11,300	9.52E+06	251	37,936	No
118-B-1_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	28,000	7.69E+06	251	30,648	No
118-B-1_Shallow_Focused	non-Rad	Dicamba	1918-00-9	$\mu\text{g}/\text{kg}$	9.1	1,582	251	6.3	Yes
118-B-1_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.43E+07	2.92E+08	251	1.17E+06	Yes
118-B-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	34,300	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	421,000	3.89E+08	251	1.55E+06	No
118-B-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	14,500	1.34E+07	251	53,531	No
118-B-1_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	4.7	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	16	14	251	0.054	Yes
118-B-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	810	563,885	251	2,247	No
118-B-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	15,200	3.89E+08	251	1.55E+06	No
118-B-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,679	— <sup>f</sup>	251	— <sup>f</sup>	—
118-B-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	59,900	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	65,100	3.89E+08	251	1.55E+06	No
118-B-1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.35	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	251	— <sup>c</sup>	—
118-B-1_Shallow_Focused	Rad	Tritium	10028-17-8	$\text{pCi}/\text{g}$	137	60	251	0.24	Yes
118-B-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.59	— <sup>e</sup>	251	— <sup>e</sup>	—
118-B-1_Shallow_Focused	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.56	— <sup>e</sup>	251	— <sup>e</sup>	—
118-B-10_Shallow	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.46	— <sup>c</sup>	8.6	— <sup>c</sup>	—
118-B-10_Shallow	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	157	— <sup>c</sup>	8.6	— <sup>c</sup>	—
118-B-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,500	10,000	2.1	4,762	No
118-B-10_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	127,000	3.89E+08	2.1	1.85E+08	No
118-B-10_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	50	1,256	2.1	598	No
118-B-10_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,400	— <sup>c</sup>	2.1	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCi}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-10_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	16,200	— <sup>c</sup>	2.1	— <sup>c</sup>	—
118-B-10_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	230	1.34E+07	2.1	6.40E+06	No
118-B-3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,500	— <sup>c</sup>	28	— <sup>c</sup>	—
118-B-3_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	298	6,000 <sup>d</sup>	28	6,000 <sup>d</sup>	No
118-B-3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,200	— <sup>c</sup>	28	— <sup>c</sup>	—
118-B-3_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.13	— <sup>c</sup>	28	— <sup>c</sup>	—
118-B-3_Shallow	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.086	— <sup>c</sup>	28	— <sup>c</sup>	—
118-B-3_Shallow	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.21	— <sup>c</sup>	28	— <sup>c</sup>	—
118-B-3_Shallow	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	0.18	— <sup>c</sup>	28	— <sup>c</sup>	—
118-B-3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,200	10,000	63	158	Yes
118-B-3_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	120,000	3.89E+08	63	6.16E+06	No
118-B-3_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	57	— <sup>c</sup>	63	— <sup>c</sup>	—
118-B-3_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	435	1,256	63	20	Yes
118-B-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	17,300	— <sup>c</sup>	63	— <sup>c</sup>	—
118-B-3_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	43,900	— <sup>c</sup>	63	— <sup>c</sup>	—
118-B-3_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	34	1.34E+07	63	212,514	No
118-B-3_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.83	— <sup>c</sup>	63	— <sup>c</sup>	—
118-B-3_Shallow_Focused	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.17	— <sup>c</sup>	63	— <sup>c</sup>	—
118-B-3_Shallow_Focused	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	1.1	— <sup>c</sup>	63	— <sup>c</sup>	—
118-B-4_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	250	6,000 <sup>d</sup>	24	6,000 <sup>d</sup>	No
118-B-4_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.32	— <sup>c</sup>	24	— <sup>c</sup>	—
118-B-4_Shallow	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.35	— <sup>c</sup>	24	— <sup>c</sup>	—
118-B-5_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.052	— <sup>c</sup>	23	— <sup>c</sup>	—
118-B-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,300	10,000	2.3	4,348	No
118-B-5_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	47,400	3.89E+08	2.3	1.69E+08	No
118-B-5_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,600	— <sup>c</sup>	2.3	— <sup>c</sup>	—
118-B-5_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,000	— <sup>c</sup>	2.3	— <sup>c</sup>	—
118-B-6_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,100	— <sup>c</sup>	6.2	— <sup>c</sup>	—
118-B-6_Deep	Rad	Tritium	10028-17-8	$\text{pCi}/\text{g}$	2,780	60	6.2	9.6	Yes
118-B-6_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,700	— <sup>c</sup>	17	— <sup>c</sup>	—
118-B-6_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	80	1.34E+07	17	790,051	No
118-B-6_Shallow	Rad	Tritium	10028-17-8	$\text{pCi}/\text{g}$	241	60	17	3.5	Yes
118-B-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,000	10,000	0.20	50,000	No
118-B-7_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	55,100	3.89E+08	0.20	1.95E+09	No
118-B-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	280	1,256	0.20	6,282	No
118-B-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,300	— <sup>c</sup>	0.20	— <sup>c</sup>	—
118-B-7_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	22,900	— <sup>c</sup>	0.20	— <sup>c</sup>	—
118-B-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	110	1.34E+07	0.20	6.72E+07	No
118-B-7_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	580	9,013	0.20	45,067	No
118-B-7_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	720	27,530	0.20	137,649	No
118-B-9_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.59E+06	— <sup>c</sup>	4.2	— <sup>c</sup>	—
118-B-9_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	695	1.19E+07	4.2	2.83E+06	No
118-B-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,900	10,000	4.2	2,381	Yes
118-B-9_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	141,000	3.89E+08	4.2	9.26E+07	No
118-B-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	177	— <sup>c</sup>	4.2	— <sup>c</sup>	—
118-B-9_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	9,700	348,488	4.2	82,973	No
118-B-9_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	435	1,256	4.2	299	Yes
118-B-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,700	— <sup>c</sup>	4.2	— <sup>c</sup>	—
118-B-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,500	9.52E+06	4.2	2.27E+06	No
118-B-9_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,500	7.69E+06	4.2	1.83E+06	No
118-B-9_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.42E+07	2.92E+08	4.2	6.96E+07	No
118-B-9_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	26,900	— <sup>c</sup>	4.2	— <sup>c</sup>	—
118-B-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	354,000	3.89E+08	4.2	9.26E+07	No
118-B-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	225	1.34E+07	4.2	3.20E+06	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-9_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	400	563,885	4.2	134,258	No
118-B-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	14,800	3.89E+08	4.2	9.26E+07	No
118-B-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	71,600	— <sup>c</sup>	4.2	— <sup>c</sup>	—
118-B-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	250,000	3.89E+08	4.2	9.26E+07	No
118-C-1_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	4.57E+06	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,300	10,000	30	338	Yes
118-C-1_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	56,000	3.89E+08	30	1.31E+07	No
118-C-1_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	880	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	2,100	348,488	30	11,773	No
118-C-1_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	8,600	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	8,400	9.52E+06	30	321,563	No
118-C-1_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	14,700	7.69E+06	30	259,784	No
118-C-1_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	1.91E+07	2.92E+08	30	9.88E+06	Yes
118-C-1_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	4,900	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	362,000	3.89E+08	30	1.31E+07	No
118-C-1_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	10,200	3.89E+08	30	1.31E+07	No
118-C-1_Shallow_1	non-Rad	Total_U_isotopes	Total_U_isotopes	$\mu\text{g/kg}$	2,191	— <sup>f</sup>	30	— <sup>f</sup>	—
118-C-1_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	41,600	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	39,100	3.89E+08	30	1.31E+07	No
118-C-1_Shallow_1	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.30	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	Rad	Europium-152	14683-23-9	$\text{pCi/g}$	0.16	— <sup>c</sup>	30	— <sup>c</sup>	—
118-C-1_Shallow_1	Rad	Uranium-233/234	U-233/234	$\text{pCi/g}$	0.53	— <sup>a</sup>	30	— <sup>a</sup>	—
118-C-1_Shallow_1	Rad	Uranium-235	15117-96-1	$\text{pCi/g}$	0.027	— <sup>a</sup>	30	— <sup>a</sup>	—
118-C-1_Shallow_1	Rad	Uranium-238	U-238	$\text{pCi/g}$	0.74	— <sup>a</sup>	30	— <sup>a</sup>	—
118-C-1_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	4.69E+06	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	2,800	10,000	17	585	Yes
118-C-1_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	54,500	3.89E+08	17	2.27E+07	No
118-C-1_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	930	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	400	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	2,200	348,488	17	20,379	No
118-C-1_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	6,200	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	7,700	9.52E+06	17	556,623	No
118-C-1_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	13,400	7.69E+06	17	449,685	No
118-C-1_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g/kg}$	35	88,471	17	5,174	No
118-C-1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	240	6,000 <sup>d</sup>	17	6,000 <sup>d</sup>	No
118-C-1_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	1.90E+07	2.92E+08	17	1.71E+07	Yes
118-C-1_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	4,300	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	359,000	3.89E+08	17	2.27E+07	No
118-C-1_Shallow_2	non-Rad	Methylene chloride	75-09-2	$\mu\text{g/kg}$	14	14	17	0.79	Yes
118-C-1_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	10,400	3.89E+08	17	2.27E+07	No
118-C-1_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	46,300	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	40,200	3.89E+08	17	2.27E+07	No
118-C-1_Shallow_2	Rad	Carbon-14	14762-75-5	$\text{pCi/g}$	12	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.15	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	Rad	Cobalt-60	10198-40-0	$\text{pCi/g}$	1.5	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	Rad	Europium-152	14683-23-9	$\text{pCi/g}$	0.28	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	Rad	Nickel-63	13981-37-8	$\text{pCi/g}$	36	— <sup>c</sup>	17	— <sup>c</sup>	—
118-C-1_Shallow_2	Rad	Tritium	10028-17-8	$\text{pCi/g}$	7.7	60	17	3.5	Yes
118-C-1_Shallow_3	non-Rad	Acetone	67-64-1	$\mu\text{g/kg}$	11	17,372	42	418	No
118-C-1_Shallow_3	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	5.54E+06	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g/kg}$	62	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	5,800	10,000	42	240	Yes
118-C-1_Shallow_3	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	78,400	3.89E+08	42	9.35E+06	No
118-C-1_Shallow_3	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g/kg}$	180	— <sup>c</sup>	42	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-C-1_Shallow_3	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	120	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	700	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	240	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,200	348,488	42	8,377	No
118-C-1_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	38	60,438	42	1,453	No
118-C-1_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	120	1,256	42	30	Yes
118-C-1_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,200	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	210	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,900	9.52E+06	42	228,804	No
118-C-1_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	45,200	7.69E+06	42	184,847	No
118-C-1_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	63	88,471	42	2,127	No
118-C-1_Shallow_3	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	320	3.89E+08	42	9.35E+06	No
118-C-1_Shallow_3	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	46	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.23E+07	2.92E+08	42	7.03E+06	Yes
118-C-1_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	23,100	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	357,000	3.89E+08	42	9.35E+06	No
118-C-1_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	50	1.34E+07	42	322,857	No
118-C-1_Shallow_3	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	12	14	42	0.33	Yes
118-C-1_Shallow_3	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	4,500	563,885	42	13,555	No
118-C-1_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,700	3.89E+08	42	9.35E+06	No
118-C-1_Shallow_3	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	320	3.89E+08	42	9.35E+06	No
118-C-1_Shallow_3	non-Rad	Total_U_isotopes	Total_U_isotopes	$\mu\text{g}/\text{kg}$	2,456	— <sup>f</sup>	42	— <sup>f</sup>	—
118-C-1_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,200	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	77,100	3.89E+08	42	9.35E+06	No
118-C-1_Shallow_3	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.96	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.042	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.14	— <sup>c</sup>	42	— <sup>c</sup>	—
118-C-1_Shallow_3	Rad	Total beta radiostromium	SR-RAD	$\text{pCi}/\text{g}$	0.28	2,121	42	51	No
118-C-1_Shallow_3	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	1.1	— <sup>d</sup>	42	— <sup>d</sup>	—
118-C-1_Shallow_3	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.83	— <sup>d</sup>	42	— <sup>d</sup>	—
118-C-1_Shallow_4	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	13	17,372	32	536	No
118-C-1_Shallow_4	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.10E+06	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	16	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,400	10,000	32	309	Yes
118-C-1_Shallow_4	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	286,000	3.89E+08	32	1.20E+07	No
118-C-1_Shallow_4	non-Rad	Benzene	71-43-2	$\mu\text{g}/\text{kg}$	1.0	5.0	32	0.15	Yes
118-C-1_Shallow_4	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	130	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	83	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	110	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	92	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	580	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	17	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	4,900	348,488	32	10,756	No
118-C-1_Shallow_4	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	6,600	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	170	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,800	9.52E+06	32	293,774	No
118-C-1_Shallow_4	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,100	7.69E+06	32	237,334	No
118-C-1_Shallow_4	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	26	88,471	32	2,731	No
118-C-1_Shallow_4	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	330	3.89E+08	32	1.20E+07	No
118-C-1_Shallow_4	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.32E+07	2.92E+08	32	9.03E+06	Yes
118-C-1_Shallow_4	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,000	— <sup>c</sup>	32	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \frac{\text{m}}{\text{m}} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \frac{\text{m}}{\text{m}}$ )	Site Width in Direction of Groundwater Flow (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-C-1_Shallow_4	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	350,000	3.89E+08	32	1.20E+07	No
118-C-1_Shallow_4	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	13	14	32	0.42	Yes
118-C-1_Shallow_4	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,100	3.89E+08	32	1.20E+07	No
118-C-1_Shallow_4	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	350	3.89E+08	32	1.20E+07	No
118-C-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,997	— <sup>f</sup>	32	— <sup>f</sup>	—
118-C-1_Shallow_4	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	55,400	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	non-Rad	Xylenes (total)	1330-20-7	$\mu\text{g}/\text{kg}$	1.0	16,314	32	504	No
118-C-1_Shallow_4	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	42,200	3.89E+08	32	1.20E+07	No
118-C-1_Shallow_4	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	1.2	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	32	— <sup>c</sup>	—
118-C-1_Shallow_4	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.54	— <sup>a</sup>	32	— <sup>a</sup>	—
118-C-1_Shallow_4	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.67	— <sup>a</sup>	32	— <sup>a</sup>	—
118-C-1_Shallow_Focused	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	24	17,372	84	206	No
118-C-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.52E+06	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,400	10,000	84	119	Yes
118-C-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	80,200	3.89E+08	84	4.62E+06	No
118-C-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	340	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	67	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,200	348,488	84	4,139	No
118-C-1_Shallow_Focused	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	39	5.0	84	0.059	Yes
118-C-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,200	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	10,500	9.52E+06	84	113,043	No
118-C-1_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	23,300	7.69E+06	84	91,326	No
118-C-1_Shallow_Focused	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	22	63,829	84	758	No
118-C-1_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	55	88,471	84	1,051	No
118-C-1_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.19E+07	2.92E+08	84	3.47E+06	Yes
118-C-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,200	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	446,000	3.89E+08	84	4.62E+06	No
118-C-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	40	1.34E+07	84	159,511	No
118-C-1_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	19	14	84	0.16	Yes
118-C-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	14,100	3.89E+08	84	4.62E+06	No
118-C-1_Shallow_Focused	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	36	7,909	84	94	No
118-C-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,438	— <sup>f</sup>	84	— <sup>f</sup>	—
118-C-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	46,400	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	45,100	3.89E+08	84	4.62E+06	No
118-C-1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.55	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.20	— <sup>c</sup>	84	— <sup>c</sup>	—
118-C-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.68	— <sup>a</sup>	84	— <sup>a</sup>	—
118-C-1_Shallow_Focused	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.48	— <sup>a</sup>	84	— <sup>a</sup>	—
118-C-2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.13	— <sup>c</sup>	9.8	— <sup>c</sup>	—
118-C-2_Shallow	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	79	— <sup>c</sup>	9.8	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	120	6,000 <sup>b</sup>	4.3	6,000 <sup>b</sup>	No
118-C-3:2_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	120,000	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,110	— <sup>f</sup>	4.3	— <sup>f</sup>	—
118-C-3:2_Deep_Focused	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	2.7	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	171	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	1.7	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	9.2	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	1.5	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	57	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Plutonium-238	13981-16-3	$\text{pCi}/\text{g}$	0.26	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	10	— <sup>c</sup>	4.3	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Rad	Technetium-99	14133-76-7	$\text{pCi}/\text{g}$	1.2	2.2	4.3	0.51	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCi}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow* (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
118-C-3:2_Deep_Focused	Rad	Total beta radiostromium	SR-RAD	pCi/g	38	2,121	4.3	493	No
118-C-3:2_Deep_Focused	Rad	Uranium-234	13966-29-5	pCi/g	0.81	— <sup>a</sup>	4.3	— <sup>a</sup>	—
118-C-3:2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.050	— <sup>a</sup>	4.3	— <sup>a</sup>	—
118-C-3:2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	0.70	— <sup>a</sup>	4.3	— <sup>a</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	7.58E+06	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g/kg}$	5.1	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g/kg}$	6.5	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,400	10,000	60	166	Yes
118-C-3:3_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	80,000	3.89E+08	60	6.45E+06	No
118-C-3:3_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g/kg}$	75	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g/kg}$	73	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g/kg}$	59	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g/kg}$	68	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	690	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	65	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	1,400	348,488	60	5,779	No
118-C-3:3_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	16,400	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g/kg}$	100	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	7,400	9.52E+06	60	157,848	No
118-C-3:3_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	38,300	7.69E+06	60	127,523	No
118-C-3:3_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g/kg}$	19	88,471	60	1,467	No
118-C-3:3_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g/kg}$	160	3.89E+08	60	6.45E+06	No
118-C-3:3_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	540	6,000 <sup>d</sup>	60	6,000 <sup>d</sup>	No
118-C-3:3_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g/kg}$	52	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	2,27E+07	2.92E+08	60	4.85E+06	Yes
118-C-3:3_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	7,900	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	297,000	3.89E+08	60	6.45E+06	No
118-C-3:3_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	800	1.34E+07	60	222,734	No
118-C-3:3_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	14,400	3.89E+08	60	6.45E+06	No
118-C-3:3_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g/kg}$	170	3.89E+08	60	6.45E+06	No
118-C-3:3_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	370	9,013	60	149	Yes
118-C-3:3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	2,025	— <sup>f</sup>	60	— <sup>f</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	48,700	— <sup>c</sup>	60	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	50,200	3.89E+08	60	6.45E+06	No
118-C-3:3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.63	— <sup>a</sup>	60	— <sup>a</sup>	—
118-C-3:3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.051	— <sup>a</sup>	60	— <sup>a</sup>	—
118-C-3:3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.68	— <sup>a</sup>	60	— <sup>a</sup>	—
118-C-4_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	2,500	10,000	5.2	1,923	Yes
118-C-4_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	44,800	3.89E+08	5.2	7.48E+07	No
118-C-4_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g/kg}$	41	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g/kg}$	44	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g/kg}$	46	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g/kg}$	45	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	130	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	7,800	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g/kg}$	44	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g/kg}$	34	88,471	5.2	17,014	No
118-C-4_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g/kg}$	74	3.89E+08	5.2	7.48E+07	No
118-C-4_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g/kg}$	19	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	20,100	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	non-Rad	Methylene chloride	75-09-2	$\mu\text{g/kg}$	12	14	5.2	2.6	Yes
118-C-4_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g/kg}$	100	3.89E+08	5.2	7.48E+07	No
118-C-4_Shallow	non-Rad	Toluene	108-88-3	$\mu\text{g/kg}$	1.7	4,437	5.2	853	No
118-C-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g/kg}$	1,795	— <sup>f</sup>	5.2	— <sup>f</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Groundwater?
118-C-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	— <sup>c</sup>	5.2	— <sup>c</sup>	—
118-C-4_Shallow	Rad	Uranium-238	U-238	pCi/g	0.60	— <sup>c</sup>	5.2	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.70E+06	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	µg/kg	9.8	17	11	1.6	Yes
120-B-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	170	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,000	10,000	11	943	Yes
120-B-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	135,000	3.89E+08	11	3.67E+07	No
120-B-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	310	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,100	348,488	11	32,876	No
120-B-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	273,000	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,100	9.52E+06	11	897,949	No
120-B-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	19,800	7.69E+06	11	725,436	No
120-B-1_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	3,800	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	380	6,000 <sup>d</sup>	11	6,000 <sup>d</sup>	No
120-B-1_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.32E+07	2.92E+08	11	2.76E+07	No
120-B-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	15,400	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	336,000	3.89E+08	11	3.67E+07	No
120-B-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	90	1.34E+07	11	1.27E+06	No
120-B-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,300	563,885	11	53,197	No
120-B-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,800	3.89E+08	11	3.67E+07	No
120-B-1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	230	27,530	11	2,597	No
120-B-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	55,900	— <sup>c</sup>	11	— <sup>c</sup>	—
120-B-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	72,200	3.89E+08	11	3.67E+07	No
126-B-3_Shallow	non-Rad	1,2,4-Trichlorobenzene	120-82-1	µg/kg	52	330	87	3.8	Yes
126-B-3_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	122	2,896	87	33	Yes
126-B-3_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	55	84,728	87	969	No
126-B-3_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	149	4.27E+07	87	488,282	No
126-B-3_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,698	10,000	87	114	Yes
126-B-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	95,187	3.89E+08	87	4.45E+06	No
126-B-3_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	348	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	269	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	191	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	244	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	550	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	55	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,975	348,488	87	3,987	Yes
126-B-3_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	356	1,256	87	14	Yes
126-B-3_Shallow	non-Rad	Carbazole	86-74-8	µg/kg	75	537	87	6.1	Yes
126-B-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,526	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	122	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	11,663	9.52E+06	87	108,905	No
126-B-3_Shallow	non-Rad	Copper	7440-50-8	µg/kg	23,531	7.69E+06	87	87,982	No
126-B-3_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	88	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	99	3,353	87	38	Yes
126-B-3_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	35	88,471	87	1,012	No
126-B-3_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	204	3.89E+08	87	4.45E+06	No
126-B-3_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	71	97,154	87	1,112	No
126-B-3_Shallow	non-Rad	Indeno[1,2,3-cd]pyrene	193-39-5	µg/kg	162	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,968	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	472,105	3.89E+08	87	4.45E+06	No
126-B-3_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	28	1.34E+07	87	153,671	No
126-B-3_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,227	563,885	87	6,452	No
126-B-3_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	118	6,798	87	78	Yes
126-B-3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	15,632	3.89E+08	87	4.45E+06	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}}$ or $\frac{\text{pCi}}{\text{g}}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
126-B-3_Shallow	non-Rad	n-Nitrosodiphenylamine	85-30-6	$\mu\text{g}/\text{kg}$	103	819	87	9.4	Yes
126-B-3_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	180	3.89E+08	87	4.45E+06	No
126-B-3_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	67,526	— <sup>c</sup>	87	— <sup>c</sup>	—
126-B-3_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	63,252	3.89E+08	87	4.45E+06	No
128-B-2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	16	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	68	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,918	10,000	95	105	Yes
128-B-2_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	71,594	3.89E+08	95	4.09E+06	No
128-B-2_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	941	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	206	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,750	348,488	95	3,668	No
128-B-2_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	17	60,438	95	636	No
128-B-2_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	190	1,256	95	13	Yes
128-B-2_Shallow	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	24	1.42E+06	95	14,958	No
128-B-2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,448	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,253	9.52E+06	95	100,192	No
128-B-2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	14,009	7.69E+06	95	80,943	No
128-B-2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	36	88,471	95	931	No
128-B-2_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	22	3.89E+08	95	4.09E+06	No
128-B-2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	32,438	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	357,286	3.89E+08	95	4.09E+06	No
128-B-2_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	22	1.34E+07	95	141,377	No
128-B-2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,077	563,885	95	5,936	No
128-B-2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,421	3.89E+08	95	4.09E+06	No
128-B-2_Shallow	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	22	7,909	95	83	No
128-B-2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	31	3.89E+08	95	4.09E+06	No
128-B-2_Shallow	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	4.0	4,437	95	47	No
128-B-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,006	— <sup>d</sup>	95	— <sup>d</sup>	—
128-B-2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	45,088	— <sup>c</sup>	95	— <sup>c</sup>	—
128-B-2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	45,328	3.89E+08	95	4.09E+06	No
128-B-2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.31	— <sup>e</sup>	95	— <sup>e</sup>	—
128-B-2_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.70	— <sup>f</sup>	95	— <sup>f</sup>	—
128-B-2_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.68	— <sup>g</sup>	95	— <sup>g</sup>	—
128-B-3_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.53E+06	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	190	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,375	10,000	15	649	Yes
128-B-3_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	87,728	3.89E+08	15	2.53E+07	No
128-B-3_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	24	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	17	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	32	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	30	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	351	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	51	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,753	348,488	15	22,629	No
128-B-3_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,012	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	38	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,532	9.52E+06	15	618,069	No
128-B-3_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,975	7.69E+06	15	499,326	No
128-B-3_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	22	88,471	15	5,745	No
128-B-3_Shallow_1	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	2.4	1,219	15	79	No
128-B-3_Shallow_1	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	20	3.89E+08	15	2.53E+07	No
128-B-3_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.59E+07	2.92E+08	15	1.90E+07	No
128-B-3_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,471	— <sup>c</sup>	15	— <sup>c</sup>	—
128-B-3_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	310,456	3.89E+08	15	2.53E+07	No
128-B-3_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	63	1.34E+07	15	872,134	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>a</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
128-B-3_Shallow_1	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	8.2	14	15	0.88	Yes
128-B-3_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,472	3.89E+08	15	2.53E+07	No
128-B-3_Shallow_1	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	31	3.89E+08	15	2.53E+07	No
128-B-3_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	34,972	- <sup>c</sup>	15	- <sup>c</sup>	-
128-B-3_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	40,336	3.89E+08	15	2.53E+07	No
128-B-3_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8,79E+06	- <sup>c</sup>	46	- <sup>c</sup>	-
128-B-3_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	17	- <sup>c</sup>	46	- <sup>c</sup>	-
128-B-3_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,473	10,000	46	219	Yes
128-B-3_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	126,504	3.89E+08	46	8.51E+06	No
128-B-3_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	450	- <sup>c</sup>	46	- <sup>c</sup>	-
128-B-3_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	6,364	348,488	46	7,626	No
128-B-3_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	520	1,256	46	27	Yes
128-B-3_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	36,702	- <sup>c</sup>	46	- <sup>c</sup>	-
128-B-3_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,114	9.52E+06	46	208,277	No
128-B-3_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	38,045	7.69E+06	46	168,263	No
128-B-3_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	544	6,000 <sup>d</sup>	46	6,000 <sup>d</sup>	No
128-B-3_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.98E+07	2.92E+08	46	6.40E+06	Yes
128-B-3_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	40,282	- <sup>c</sup>	46	- <sup>c</sup>	-
128-B-3_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	398,092	3.89E+08	46	8.51E+06	No
128-B-3_Shallow_2	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	72	1.34E+07	46	293,892	No
128-B-3_Shallow_2	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	12	14	46	0.30	Yes
128-B-3_Shallow_2	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	870	563,885	46	12,339	No
128-B-3_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	17,711	3.89E+08	46	8.51E+06	No
128-B-3_Shallow_2	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	241	27,530	46	602	No
128-B-3_Shallow_2	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	431,000	1.00E+06 <sup>d</sup>	46	1.00E+06 <sup>d</sup>	No
128-B-3_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	41,172	- <sup>c</sup>	46	- <sup>c</sup>	-
128-B-3_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	109,940	3.89E+08	46	8.51E+06	No
128-B-3_Shallow_3	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	12	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	12	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	15	17,372	40	436	No
128-B-3_Shallow_3	non-Rad	Aldrin	309-00-2	$\mu\text{g}/\text{kg}$	0.37	9,878	40	248	No
128-B-3_Shallow_3	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	8.03E+06	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	29	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	6.9	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,947	10,000	40	251	Yes
128-B-3_Shallow_3	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	101,772	3.89E+08	40	9.77E+06	No
128-B-3_Shallow_3	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	47	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	53	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	55	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	43	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	425	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	64	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,624	348,488	40	8,756	No
128-B-3_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	590	1,256	40	32	Yes
128-B-3_Shallow_3	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	0.33	1.42E+06	40	35,705	No
128-B-3_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,508	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	100	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,273	9.52E+06	40	239,152	No
128-B-3_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	18,016	7.69E+06	40	193,207	No
128-B-3_Shallow_3	non-Rad	Dibenz(a,h)anthracene	53-70-3	$\mu\text{g}/\text{kg}$	56	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	29	88,471	40	2,223	No
128-B-3_Shallow_3	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	62	3.89E+08	40	9.77E+06	No
128-B-3_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	293	6,000 <sup>d</sup>	40	6,000 <sup>d</sup>	No
128-B-3_Shallow_3	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	50	- <sup>c</sup>	40	- <sup>c</sup>	-
128-B-3_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.98E+07	2.92E+08	40	7.35E+06	Yes



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
128-B-3_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,356	— <sup>c</sup>	40	— <sup>c</sup>	—
128-B-3_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	380,095	3.89E+08	40	9.77E+06	No
128-B-3_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	48	1.34E+07	40	337,459	No
128-B-3_Shallow_3	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	3.6	— <sup>c</sup>	40	— <sup>c</sup>	—
128-B-3_Shallow_3	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	16	14	40	0.34	Yes
128-B-3_Shallow_3	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	4,700	563,885	40	14,168	No
128-B-3_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,571	3.89E+08	40	9.77E+06	No
128-B-3_Shallow_3	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	87	3.89E+08	40	9.77E+06	No
128-B-3_Shallow_3	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	300	27,530	40	692	No
128-B-3_Shallow_3	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	1.8	4,437	40	111	No
128-B-3_Shallow_3	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	258,000	1.00E+06 <sup>d</sup>	40	1.00E+06 <sup>d</sup>	No
128-B-3_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	41,734	— <sup>c</sup>	40	— <sup>c</sup>	—
128-B-3_Shallow_3	non-Rad	Xylenes (total)	1330-20-7	$\mu\text{g}/\text{kg}$	2.5	16,314	40	410	No
128-B-3_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	49,543	3.89E+08	40	9.77E+06	No
128-C-1_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	858	1.19E+07	45	262,067	No
128-C-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	11	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,270	10,000	45	220	Yes
128-C-1_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	60,255	3.89E+08	45	8.57E+06	No
128-C-1_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	29	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	31	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	32	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	30	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	784	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	1,682	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	9,818	348,488	45	7,676	Yes
128-C-1_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	990	1,256	45	28	Yes
128-C-1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	17,242	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	38	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,402	9.52E+06	45	209,653	No
128-C-1_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	48,008	7.69E+06	45	169,375	No
128-C-1_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	40	88,471	45	1,949	No
128-C-1_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	53	3.89E+08	45	8.57E+06	No
128-C-1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	30,352	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	6,737	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	315,815	3.89E+08	45	8.57E+06	No
128-C-1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	50	1.34E+07	45	295,834	No
128-C-1_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,900	563,885	45	12,420	No
128-C-1_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,617	3.89E+08	45	8.57E+06	No
128-C-1_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	43	3.89E+08	45	8.57E+06	No
128-C-1_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	1,300	9,013	45	199	Yes
128-C-1_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	6,600	27,530	45	606	Yes
128-C-1_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	39,675	— <sup>c</sup>	45	— <sup>c</sup>	—
128-C-1_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	70,414	3.89E+08	45	8.57E+06	No
128-C-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	6,100	10,000	37	270	Yes
128-C-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	94,710	3.89E+08	37	1.05E+07	No
128-C-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	36	— <sup>c</sup>	37	— <sup>c</sup>	—
128-C-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	1,797	1,256	37	34	Yes
128-C-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	19,600	— <sup>c</sup>	37	— <sup>c</sup>	—
128-C-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	61,300	— <sup>c</sup>	37	— <sup>c</sup>	—
128-C-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	200	1.34E+07	37	362,996	No
128-C-1_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	150	27,530	37	744	No
128-C-1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	44,700	1.00E+06 <sup>d</sup>	37	1.00E+06 <sup>d</sup>	No
1607-B1_Shallow_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g}/\text{kg}$	1.0	836,540	6.3	132,784	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Site Width in Direction of Groundwater Flow (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
1607-B1_Shallow_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	$\mu\text{g}/\text{kg}$	0.52	1.7	6.3	0.26	Yes
1607-B1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.95E+06	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	11	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,200	10,000	6.3	1,587	Yes
1607-B1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	138,000	3.89E+08	6.3	6.17E+07	No
1607-B1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	270	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	98	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,400	348,488	6.3	55,316	No
1607-B1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,600	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,900	9.52E+06	6.3	1.51E+06	No
1607-B1_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,200	7.69E+06	6.3	1.22E+06	No
1607-B1_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	26	88,471	6.3	14,043	No
1607-B1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	300	6,000 <sup>d</sup>	6.3	6,000 <sup>d</sup>	No
1607-B1_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2,30E+07	2,92E+08	6.3	4.64E+07	No
1607-B1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,600	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	304,000	3.89E+08	6.3	6.17E+07	No
1607-B1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	230	1.34E+07	6.3	2.13E+06	No
1607-B1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	570	563,885	6.3	89,505	No
1607-B1_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,300	3.89E+08	6.3	6.17E+07	No
1607-B1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	42,200	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B1_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	93,900	3.89E+08	6.3	6.17E+07	No
1607-B1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCl}/\text{g}$	0.12	— <sup>c</sup>	6.3	— <sup>c</sup>	—
1607-B10_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	4.5	— <sup>c</sup>	15	— <sup>c</sup>	—
1607-B10_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	57	— <sup>c</sup>	15	— <sup>c</sup>	—
1607-B10_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,500	10,000	15	685	Yes
1607-B10_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	82,400	3.89E+08	15	2.66E+07	No
1607-B10_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	15	— <sup>c</sup>	—
1607-B10_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	160	1,256	15	86	Yes
1607-B10_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	25,200	— <sup>c</sup>	15	— <sup>c</sup>	—
1607-B10_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	30	3.89E+08	15	2.66E+07	No
1607-B10_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	17,900	— <sup>c</sup>	15	— <sup>c</sup>	—
1607-B10_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	380	1.34E+07	15	919,922	No
1607-B10_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	27	3.89E+08	15	2.66E+07	No
1607-B10_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCl}/\text{g}$	0.054	— <sup>c</sup>	15	— <sup>c</sup>	—
1607-B11_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,900	10,000	10	980	Yes
1607-B11_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	76,500	3.89E+08	10	3.81E+07	No
1607-B11_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	680	— <sup>c</sup>	10	— <sup>c</sup>	—
1607-B11_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,000	— <sup>c</sup>	10	— <sup>c</sup>	—
1607-B11_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,300	— <sup>c</sup>	10	— <sup>c</sup>	—
1607-B11_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	30	1.34E+07	10	1.32E+06	No
1607-B2:1_Shallow	non-Rad	2,4,5-T(2,4,5-Trichlorophenoxyacetic acid)	93-76-5	$\mu\text{g}/\text{kg}$	47	941	36	26	Yes
1607-B2:1_Shallow	non-Rad	2,4,5-TP[2(2,4,5-Trichlorophenoxy)propionic acid]Silvex	93-72-1	$\mu\text{g}/\text{kg}$	23	415	36	12	Yes
1607-B2:1_Shallow	non-Rad	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	$\mu\text{g}/\text{kg}$	110	400	36	11	Yes
1607-B2:1_Shallow	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	$\mu\text{g}/\text{kg}$	250	705	36	20	Yes
1607-B2:1_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	154	2,896	36	81	Yes
1607-B2:1_Shallow	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	15	17,372	36	487	No
1607-B2:1_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	457	1.19E+07	36	333,272	No
1607-B2:1_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	7,121	10,000	36	280	Yes
1607-B2:1_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	386,965	3.89E+08	36	1.09E+07	No
1607-B2:1_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	760	— <sup>c</sup>	36	— <sup>c</sup>	—
1607-B2:1_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	19,810	348,488	36	9,762	Yes
1607-B2:1_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	128	1,256	36	35	Yes
1607-B2:1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	19,106	— <sup>c</sup>	36	— <sup>c</sup>	—
1607-B2:1_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	12,463	9.52E+06	36	266,618	No
1607-B2:1_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	30,171	7.69E+06	36	215,396	No



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
1607-B2:1_Shallow	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	34	3,353	36	94	No
1607-B2:1_Shallow	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	26	63,829	36	1,788	No
1607-B2:1_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	21	88,471	36	2,478	No
1607-B2:1_Shallow	non-Rad	Dinoseb(2-secButyl-4,6-dinitrophenol)	88-85-7	$\mu\text{g}/\text{kg}$	27	1,082	36	30	No
1607-B2:1_Shallow	non-Rad	Endosulfan I	959-98-8	$\mu\text{g}/\text{kg}$	1.7	7,192	36	201	No
1607-B2:1_Shallow	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	1.7	1,219	36	34	No
1607-B2:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	269	6,000 <sup>a</sup>	36	6,000 <sup>a</sup>	No
1607-B2:1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	24	— <sup>c</sup>	36	— <sup>c</sup>	—
1607-B2:1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	9,814	— <sup>c</sup>	36	— <sup>c</sup>	—
1607-B2:1_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	577,831	3.89E+08	36	1.09E+07	No
1607-B2:1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	36	376,215	No
1607-B2:1_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,097	563,885	36	15,795	No
1607-B2:1_Shallow	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	107	6,798	36	190	No
1607-B2:1_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	20,845	3.89E+08	36	1.09E+07	No
1607-B2:1_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	140	27,530	36	771	No
1607-B2:1_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	54,015	— <sup>c</sup>	36	— <sup>c</sup>	—
1607-B2:1_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	67,465	3.89E+08	36	1.09E+07	No
1607-B2:2_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	19	2,896	240	12	Yes
1607-B2:2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenylchloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	18	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	17	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	$\mu\text{g}/\text{kg}$	0.87	1.42E+06	240	5,919	No
1607-B2:2_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.99E+06	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	510	1.19E+07	240	49,554	No
1607-B2:2_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	330	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	6.7	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,098	10,000	240	42	Yes
1607-B2:2_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	115,790	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	33	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	444	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	1.9	3.8	240	0.016	Yes
1607-B2:2_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	2,681	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	4,666	348,488	240	1,451	Yes
1607-B2:2_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	249	1,256	240	5.2	Yes
1607-B2:2_Shallow	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	0.43	1.42E+06	240	5,919	No
1607-B2:2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,679	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	64	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,488	9.52E+06	240	39,643	No
1607-B2:2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	51,480	7.69E+06	240	32,027	Yes
1607-B2:2_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	33	88,471	240	368	No
1607-B2:2_Shallow	non-Rad	Endosulfan I	959-98-8	$\mu\text{g}/\text{kg}$	6.9	7,192	240	30	No
1607-B2:2_Shallow	non-Rad	Endosulfan II	33213-65-9	$\mu\text{g}/\text{kg}$	3.4	7,192	240	30	No
1607-B2:2_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	79	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Heptachlor epoxide	1024-57-3	$\mu\text{g}/\text{kg}$	0.60	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	436	6,000 <sup>a</sup>	240	6,000 <sup>a</sup>	No
1607-B2:2_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	25	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.05E+07	2.92E+08	240	1.22E+06	Yes
1607-B2:2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,463	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	8,515	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	367,714	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	240	1.34E+07	240	55,939	No
1607-B2:2_Shallow	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	15	— <sup>c</sup>	240	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
1607-B2:2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	395	563,885	240	2,349	No
1607-B2:2_Shallow	non-Rad	Naphthalene	91-20-3	$\mu\text{g/kg}$	17	6,798	240	28	No
1607-B2:2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	12,682	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Phenol	108-95-2	$\mu\text{g/kg}$	17	7,909	240	33	No
1607-B2:2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g/kg}$	66	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Strontium	7440-24-6	$\mu\text{g/kg}$	47,600	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	46,182	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	52,128	3.89E+08	240	1.62E+06	No
1607-B2:2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.42	— <sup>c</sup>	240	— <sup>c</sup>	—
1607-B2:2_Shallow	Rad	Total beta radiostromium	SR-RAD	$\text{pCi/g}$	0.90	2,121	240	8.8	No
1607-B7_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,100	10,000	12	813	Yes
1607-B7_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	80,800	3.89E+08	12	3.16E+07	No
1607-B7_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g/kg}$	2.1	3.8	12	0.31	Yes
1607-B7_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	31	— <sup>c</sup>	12	— <sup>c</sup>	—
1607-B7_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	236	1,256	12	102	Yes
1607-B7_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	10,300	— <sup>c</sup>	12	— <sup>c</sup>	—
1607-B7_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	43,000	— <sup>c</sup>	12	— <sup>c</sup>	—
1607-B7_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	699	9,013	12	733	No
1607-B7_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g/kg}$	96	27,530	12	2,238	No
1607-B8_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g/kg}$	27	— <sup>c</sup>	14	— <sup>c</sup>	—
1607-B8_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g/kg}$	380	— <sup>c</sup>	14	— <sup>c</sup>	—
1607-B8_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	4,100	10,000	14	699	Yes
1607-B8_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	67,300	3.89E+08	14	2.72E+07	No
1607-B8_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	102	1,256	14	88	Yes
1607-B8_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	12,500	— <sup>c</sup>	14	— <sup>c</sup>	—
1607-B8_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	166,000	— <sup>c</sup>	14	— <sup>c</sup>	—
1607-B8_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	103	1.34E+07	14	939,221	No
1607-B8_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi/g}$	0.072	— <sup>c</sup>	14	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Anthracene	120-12-7	$\mu\text{g/kg}$	23	4.27E+07	28	1.52E+06	No
1607-B9_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	3,511	10,000	28	357	Yes
1607-B9_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	63,408	3.89E+08	28	1.39E+07	No
1607-B9_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g/kg}$	163	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g/kg}$	78	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g/kg}$	115	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g/kg}$	115	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	41	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	479	1,256	28	45	Yes
1607-B9_Shallow	non-Rad	Carbazole	86-74-8	$\mu\text{g/kg}$	25	537	28	19	Yes
1607-B9_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	11,970	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g/kg}$	213	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Dieldrin	60-57-1	$\mu\text{g/kg}$	4.4	166	28	5.9	No
1607-B9_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g/kg}$	96	88,471	28	3,160	No
1607-B9_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g/kg}$	314	3.89E+08	28	1.39E+07	No
1607-B9_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g/kg}$	38	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	10,831	— <sup>c</sup>	28	— <sup>c</sup>	—
1607-B9_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	68	1.34E+07	28	479,674	No
1607-B9_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g/kg}$	272	3.89E+08	28	1.39E+07	No
1607-B9_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	435	9,013	28	322	Yes
600-232_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g/kg}$	23	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	2,048	10,000	148	68	Yes
600-232_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	58,814	3.89E+08	148	2.63E+06	No
600-232_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g/kg}$	143	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g/kg}$	91	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g/kg}$	125	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g/kg}$	117	— <sup>c</sup>	148	— <sup>c</sup>	—



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCl}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCl}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
600-232_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	36	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	78	1,256	148	8.5	Yes
600-232_Shallow	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	28	537	148	3.6	Yes
600-232_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,520	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	178	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	18	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Di-n-octylphthalate	117-84-0	$\mu\text{g}/\text{kg}$	28	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	257	3.89E+08	148	2.63E+06	No
600-232_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	43	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,394	— <sup>c</sup>	148	— <sup>c</sup>	—
600-232_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	1.34E+07	148	90,872	No
600-232_Shallow	non-Rad	Pentachlorophenol	87-86-5	$\mu\text{g}/\text{kg}$	150	330	148	2.2	Yes
600-232_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	227	3.89E+08	148	2.63E+06	No
600-232_Shallow	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	10,059	1.00E+06 <sup>d</sup>	148	1.00E+06 <sup>d</sup>	No
600-233_Shallow_Focused	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	47	4.27E+07	2.1	2.03E+07	No
600-233_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	51,200	3.89E+08	2.1	1.85E+08	No
600-233_Shallow_Focused	non-Rad	Benzo[a]anthracene	56-55-3	$\mu\text{g}/\text{kg}$	290	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Benzo[a]pyrene	50-32-8	$\mu\text{g}/\text{kg}$	180	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Benzo[b]fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	220	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Benzo[k]fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	180	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	410	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,500	348,488	2.1	165,947	No
600-233_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	28	60,438	2.1	28,780	No
600-233_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	280	1,256	2.1	598	No
600-233_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	7,900	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	340	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,300	9.52E+06	2.1	4.53E+06	No
600-233_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	11,500	7.69E+06	2.1	3.66E+06	No
600-233_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	61	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	68	88,471	2.1	42,129	No
600-233_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	690	3.89E+08	2.1	1.85E+08	No
600-233_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	110	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,900	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	270,000	3.89E+08	2.1	1.85E+08	No
600-233_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	8,300	3.89E+08	2.1	1.85E+08	No
600-233_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	510	3.89E+08	2.1	1.85E+08	No
600-233_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	3,000	9,013	2.1	4,292	No
600-233_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	37,000	— <sup>c</sup>	2.1	— <sup>c</sup>	—
600-233_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	33,800	3.89E+08	2.1	1.85E+08	No

## Notes:

- a. ECF-HANFORD-15-0129. A 70:30 source distribution is used for analytes with  $K_d \geq 2 \text{ mL/g}$ ; a 100:0 source distribution is used for analytes with  $K_d < 2 \text{ mL/g}$ . These soil screening levels protective of groundwater and protective of surface water are provided on a unit-length basis. To apply these soil screening levels, divide the listed value by a representative length across the waste site decision unit in the general direction of groundwater flow to obtain the soil screening level for evaluation use. (Note that this scaling is not applicable to soil cleanup levels for arsenic, hexavalent chromium, or TPH-diesel.)
- b. ECF-100-BC5-15-0119, *Determination of Representative Linear Dimensions for 100-BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations*.
- c. The calculated soil screening level for the analyte is considered non-representative because: (1) breakthrough is simulated within 1,000 years for some soil columns while other soil columns (a majority) show no breakthrough (breakthrough defined as concentrations exceeding  $1\text{E-}04 \mu\text{g/L}$  or activity exceeding  $1\text{E-}04 \text{ pCi/L}$ ).
- d. The soil screening level for Total Petroleum Hydrocarbons is a default screening level obtained from WAC 173-340-900, Table 747-5, "Residual Saturation Screening Levels for TPH."
- e. The soil screening level for hexavalent chromium is set to  $6,000 \mu\text{g}/\text{kg}$  based on the evaluation in ECF-Hanford-11-0165; this value is not dependent on waste site size.
- f. No Value Required. Uranium is not modeled because uranium was not detected at levels above Hanford site background at any remediated waste site in 100-BC, therefore it is not a soil COPC.



Table 7-1. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Groundwater?
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g. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based ( $\mu\text{g}/\text{kg}$ ) concentrations and summing to provide a mass-based total uranium exposure point concentration (identified as Total\_U\_Isotopes), as described in ECF-100BC1-11-0012, *Computation of Exposure Point Concentrations for the 100-BC-1 and 100-BC-2 Source Operable Units*.

h. A drinking water standard is not available.

-- = Not applicable or no value



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	45	-- <sup>c</sup>	5.86E+01	-- <sup>c</sup>	--
100-B-1_Shallow_1	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	48	-- <sup>c</sup>	5.86E+01	-- <sup>c</sup>	--
100-B-1_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	24	-- <sup>c</sup>	5.86E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g}/\text{kg}$	1.5	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g}/\text{kg}$	1.3	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	2.9	-- <sup>d</sup>	8.03E+01	-- <sup>d</sup>	--
100-B-1_Shallow_2	non-Rad	Aldrin	309-00-2	$\mu\text{g}/\text{kg}$	1.1	7,293	8.03E+01	91	No
100-B-1_Shallow_2	non-Rad	Alpha-BHC	319-84-6	$\mu\text{g}/\text{kg}$	1.0	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Alpha-Chlordane	5103-71-9	$\mu\text{g}/\text{kg}$	1.3	24,442	8.03E+01	304	No
100-B-1_Shallow_2	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	92	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	33	-- <sup>d</sup>	8.03E+01	-- <sup>d</sup>	--
100-B-1_Shallow_2	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	120	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	30	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	55	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	65	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	6.8	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	41	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	33	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	1.3	24,442	8.03E+01	304	No
100-B-1_Shallow_2	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	150	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Dieldrin	60-57-1	$\mu\text{g}/\text{kg}$	1.3	58	8.03E+01	0.72	Yes
100-B-1_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	35	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Endosulfan I	959-98-8	$\mu\text{g}/\text{kg}$	1.3	4.2	8.03E+01	0.052	Yes
100-B-1_Shallow_2	non-Rad	Endosulfan II	33213-65-9	$\mu\text{g}/\text{kg}$	1.5	4.2	8.03E+01	0.052	Yes
100-B-1_Shallow_2	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	1.5	3.0	8.03E+01	0.037	Yes
100-B-1_Shallow_2	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	700	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	35	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_2	non-Rad	Gamma-BHC (Lindane)	58-89-9	$\mu\text{g}/\text{kg}$	1.2	3.8	8.03E+01	0.048	Yes
100-B-1_Shallow_2	non-Rad	Heptachlor	76-44-8	$\mu\text{g}/\text{kg}$	5.5	2.0	8.03E+01	0.025	Yes
100-B-1_Shallow_2	non-Rad	Heptachlor epoxide	1024-57-3	$\mu\text{g}/\text{kg}$	1.4	-- <sup>d</sup>	8.03E+01	-- <sup>d</sup>	--
100-B-1_Shallow_2	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	5.6	-- <sup>d</sup>	8.03E+01	-- <sup>d</sup>	--
100-B-1_Shallow_2	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	750	-- <sup>c</sup>	8.03E+01	-- <sup>c</sup>	--
100-B-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,400	1.05E+07	3.78E+01	276,836	No
100-B-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	92,800	-- <sup>c</sup>	3.78E+01	-- <sup>c</sup>	--
100-B-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	103	-- <sup>c</sup>	3.78E+01	-- <sup>c</sup>	--
100-B-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	72	500	3.78E+01	13	Yes
100-B-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,900	-- <sup>d</sup>	3.78E+01	-- <sup>d</sup>	--
100-B-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,800	-- <sup>d</sup>	3.78E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	9,520	-- <sup>c</sup>	3.78E+01	-- <sup>c</sup>	--
100-B-1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.13	-- <sup>c</sup>	3.78E+01	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.44E+06	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-11_Shallow_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	1,400	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,900	1.05E+07	2.00E+00	5.23E+06	No
100-B-11_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	74,400	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	82	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,700	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	224	500	2.00E+00	250	No
100-B-11_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,600	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-11_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,100	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,500	93,717	2.00E+00	46,859	No
100-B-11_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.46E+07	2.61E+07	2.00E+00	1.31E+07	Yes
100-B-11_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	16,600	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-11_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	318,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	18	80,585	2.00E+00	40,293	No
100-B-11_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	551	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,200	3.89E+08	2.00E+00	1.95E+08	No
100-B-11_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	55,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-11_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	65,000	3.89E+08	2.00E+00	1.95E+08	No
100-B-11_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	0.25	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	No
100-B-14:1_Deep	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.23	-- <sup>c</sup>	1.84E+01	-- <sup>c</sup>	--
100-B-14:1_Deep_Focused	Rad	Carbon-14	14762-75-5	$\text{pCi}/\text{g}$	275	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	336	6,000 <sup>e</sup>	4.46E+01	6,000 <sup>e</sup>	No
100-B-14:1_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.061	-- <sup>c</sup>	4.46E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	34	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.93E+06	-- <sup>d</sup>	5.92E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,350	1.05E+07	5.92E+01	176,763	No
100-B-14:2_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	256,706	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	21	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	23	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	378	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	0.60	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,700	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	135	500	5.92E+01	8.4	Yes
100-B-14:2_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,821	-- <sup>d</sup>	5.92E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_1	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,306	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot \text{m} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \text{m}\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-14:2_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	17,751	93,717	5.92E+01	1,583	Yes
100-B-14:2_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g/kg}$	277	6,000 <sup>e</sup>	5.92E+01	6,000 <sup>e</sup>	No
100-B-14:2_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g/kg}$	2.08E+07	2.61E+07	5.92E+01	441,045	Yes
100-B-14:2_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	5,727	-- <sup>d</sup>	5.92E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_1	non-Rad	Lithium	7439-93-2	$\mu\text{g/kg}$	7,236	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	348,187	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	36	80,585	5.92E+01	1,361	No
100-B-14:2_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	685	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Naphthalene	91-20-3	$\mu\text{g/kg}$	24	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	11,448	3.89E+08	5.92E+01	6.57E+06	No
100-B-14:2_Shallow_1	non-Rad	Strontium	7440-24-6	$\mu\text{g/kg}$	59,947	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	48,661	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	44,656	3.89E+08	5.92E+01	6.57E+06	No
100-B-14:2_Shallow_1	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi/g}$	0.31	-- <sup>c</sup>	5.92E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g/kg}$	2.1	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	$\mu\text{g/kg}$	7.6	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g/kg}$	6.7	-- <sup>d</sup>	1.22E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_2	non-Rad	Acenaphthene	83-32-9	$\mu\text{g/kg}$	197	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Aldrin	309-00-2	$\mu\text{g/kg}$	2.4	7,293	1.22E+01	598	No
100-B-14:2_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	5.99E+06	-- <sup>d</sup>	1.22E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_2	non-Rad	Anthracene	120-12-7	$\mu\text{g/kg}$	345	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Antimony	7440-36-0	$\mu\text{g/kg}$	640	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g/kg}$	81	-- <sup>d</sup>	1.22E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g/kg}$	5.3	-- <sup>d</sup>	1.22E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	4,093	1.05E+07	1.22E+01	857,737	No
100-B-14:2_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	74,830	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g/kg}$	703	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g/kg}$	655	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g/kg}$	534	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g/kg}$	564	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	508	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	27	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	3,600	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	202	500	1.22E+01	41	Yes
100-B-14:2_Shallow_2	non-Rad	Carbazole	86-74-8	$\mu\text{g/kg}$	214	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Chlordane	57-74-9	$\mu\text{g/kg}$	1.2	24,442	1.22E+01	2,003	No
100-B-14:2_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	10,992	-- <sup>d</sup>	1.22E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_2	non-Rad	Chrysene	218-01-9	$\mu\text{g/kg}$	830	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	8,290	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-14:2_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	23,864	93,717	1.22E+01	7,682	Yes
100-B-14:2_Shallow_2	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	318	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Dibenzofuran	132-64-9	µg/kg	82	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Dieldrin	60-57-1	µg/kg	3.6	58	1.22E+01	4.7	No
100-B-14:2_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	28	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Di-n-octylphthalate	117-84-0	µg/kg	95	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	1,336	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	130	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	418	6,000 <sup>e</sup>	1.22E+01	6,000 <sup>e</sup>	No
100-B-14:2_Shallow_2	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	423	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.09E+07	2.61E+07	1.22E+01	2.14E+06	Yes
100-B-14:2_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	35,014	-- <sup>d</sup>	1.22E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_2	non-Rad	Lithium	7439-93-2	µg/kg	6,800	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	341,978	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	118	80,585	1.22E+01	6,605	No
100-B-14:2_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	794	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Naphthalene	91-20-3	µg/kg	55	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	15,473	3.89E+08	1.22E+01	3.19E+07	No
100-B-14:2_Shallow_2	non-Rad	Pentachlorophenol	87-86-5	µg/kg	1,900	330	1.22E+01	27	Yes
100-B-14:2_Shallow_2	non-Rad	Pyrene	129-00-0	µg/kg	1,289	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	35,581	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,100	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	46,320	-- <sup>c</sup>	1.22E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	85,443	3.89E+08	1.22E+01	3.19E+07	No
100-B-14:2_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	5.60E+06	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	8.9	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	3,983	1.05E+07	1.93E+01	542,197	No
100-B-14:2_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	59,842	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	333	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	0.62	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	35	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Boron	7440-42-8	µg/kg	1,511	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	155	500	1.93E+01	26	Yes
100-B-14:2_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	7,841	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	7,889	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	17,742	93,717	1.93E+01	4,856	Yes
100-B-14:2_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	21	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Endrin	72-20-8	µg/kg	1.3	3.0	1.93E+01	0.16	Yes
100-B-14:2_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	363	6,000 <sup>e</sup>	1.93E+01	6,000 <sup>e</sup>	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-14:2_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	1.87E+07	2.61E+07	1.93E+01	1.35E+06	Yes
100-B-14:2_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	6,871	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_3	non-Rad	Lithium	7439-93-2	µg/kg	7,759	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	335,398	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	28	80,585	1.93E+01	4,175	No
100-B-14:2_Shallow_3	non-Rad	Methoxychlor	72-43-5	µg/kg	49	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-14:2_Shallow_3	non-Rad	Molybdenum	7439-98-7	µg/kg	522	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	11,050	3.89E+08	1.93E+01	2.02E+07	No
100-B-14:2_Shallow_3	non-Rad	Pyrene	129-00-0	µg/kg	20	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Strontium	7440-24-6	µg/kg	34,255	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Tin	7440-31-5	µg/kg	1,351	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	44,271	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	39,869	3.89E+08	1.93E+01	2.02E+07	No
100-B-14:2_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.077	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.35E+06	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	1.05E+07	2.00E+00	5.23E+06	No
100-B-14:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	73,100	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	812	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	300	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	241	500	2.00E+00	250	No
100-B-14:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,400	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,900	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,500	93,717	2.00E+00	46,859	No
100-B-14:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	248	6,000 <sup>e</sup>	2.00E+00	6,000 <sup>e</sup>	No
100-B-14:2_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07	2.61E+07	2.00E+00	1.31E+07	Yes
100-B-14:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	8,900	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	6,400	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	347,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	44	80,585	2.00E+00	40,293	No
100-B-14:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	12,500	3.89E+08	2.00E+00	1.95E+08	No
100-B-14:2_Shallow_Focused	non-Rad	Strontium	7440-24-6	µg/kg	34,200	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,800	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	50,800	3.89E+08	2.00E+00	1.95E+08	No
100-B-14:3_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.19E+06	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400	1.05E+07	2.00E+00	5.23E+06	No
100-B-14:3_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	59,800	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	311	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	46	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-14:3_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	5,600	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,900	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,100	93,717	2.00E+00	46,859	No
100-B-14:3_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.55E+07	2.61E+07	2.00E+00	1.31E+07	Yes
100-B-14:3_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,900	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	355,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	528	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,500	3.89E+08	2.00E+00	1.95E+08	No
100-B-14:3_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	164	826	2.00E+00	413	No
100-B-14:3_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,400	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	45,900	3.89E+08	2.00E+00	1.95E+08	No
100-B-14:5_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.57E+06	-- <sup>d</sup>	1.00E-02	-- <sup>d</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	310	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	1.05E+07	1.00E-02	1.05E+09	No
100-B-14:5_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	82,100	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	360	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	4,400	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	190	500	1.00E-02	50,000	No
100-B-14:5_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,500	-- <sup>d</sup>	1.00E-02	-- <sup>d</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,900	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	17,700	93,717	1.00E-02	9.37E+06	No
100-B-14:5_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.68E+07	2.61E+07	1.00E-02	2.61E+09	No
100-B-14:5_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,300	-- <sup>d</sup>	1.00E-02	-- <sup>d</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	395,000	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	560	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,000	3.89E+08	1.00E-02	3.89E+10	No
100-B-14:5_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	90	826	1.00E-02	82,600	No
100-B-14:5_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	69,400	-- <sup>c</sup>	1.00E-02	-- <sup>c</sup>	--
100-B-14:5_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	76,200	3.89E+08	1.00E-02	3.89E+10	No
100-B-14:6_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	9.26E+06	-- <sup>d</sup>	1.09E+01	-- <sup>d</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,800	1.05E+07	1.09E+01	960,036	No
100-B-14:6_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	364,000	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	470	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,800	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	250	500	1.09E+01	46	Yes
100-B-14:6_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	49,100	-- <sup>d</sup>	1.09E+01	-- <sup>d</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,600	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,000	93,717	1.09E+01	8,598	Yes
100-B-14:6_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.67E+07	2.61E+07	1.09E+01	2.40E+06	Yes



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-14:6_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	10,800	-- <sup>d</sup>	1.09E+01	-- <sup>d</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	446,000	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	1,400	80,585	1.09E+01	7,393	No
100-B-14:6_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	940	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	25,100	3.89E+08	1.09E+01	3.57E+07	No
100-B-14:6_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	90	826	1.09E+01	76	Yes
100-B-14:6_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,900	-- <sup>c</sup>	1.09E+01	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	57,000	3.89E+08	1.09E+01	3.57E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.14E+07	-- <sup>d</sup>	5.70E+00	-- <sup>d</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	410	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	1.05E+07	5.70E+00	1.84E+06	No
100-B-14:7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	128,000	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	430	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,400	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	500	500	5.70E+00	88	Yes
100-B-14:7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	25,400	-- <sup>d</sup>	5.70E+00	-- <sup>d</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,600	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,300	93,717	5.70E+00	16,442	Yes
100-B-14:7_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.52E+07	2.61E+07	5.70E+00	4.58E+06	Yes
100-B-14:7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,100	-- <sup>d</sup>	5.70E+00	-- <sup>d</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	408,000	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	80	80,585	5.70E+00	14,138	No
100-B-14:7_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	760	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	22,700	3.89E+08	5.70E+00	6.82E+07	No
100-B-14:7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	52,500	-- <sup>c</sup>	5.70E+00	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	79,400	3.89E+08	5.70E+00	6.82E+07	No
100-B-16_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	24	-- <sup>d</sup>	1.12E+01	-- <sup>d</sup>	--
100-B-16_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	1.05E+07	1.12E+01	934,321	No
100-B-16_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	226,000	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	26	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	21	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	61	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	46	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	100	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	360	500	1.12E+01	45	Yes
100-B-16_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,400	-- <sup>d</sup>	1.12E+01	-- <sup>d</sup>	--
100-B-16_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	110	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	37	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	150	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (μg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (μg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-16_Shallow_Focused	non-Rad	Lead	7439-92-1	μg/kg	8,700	-- <sup>d</sup>	1.12E+01	-- <sup>d</sup>	--
100-B-16_Shallow_Focused	non-Rad	Mercury	7439-97-6	μg/kg	30	80,585	1.12E+01	7,195	No
100-B-16_Shallow_Focused	non-Rad	Pyrene	129-00-0	μg/kg	120	-- <sup>c</sup>	1.12E+01	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	non-Rad	Silver	7440-22-4	μg/kg	1,500	826	1.12E+01	74	Yes
100-B-18_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	μg/kg	170	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Acetone	67-64-1	μg/kg	73	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Aluminum	7429-90-5	μg/kg	1.12E+07	-- <sup>d</sup>	1.97E+01	-- <sup>d</sup>	--
100-B-18_Shallow_Focused	non-Rad	Anthracene	120-12-7	μg/kg	580	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Antimony	7440-36-0	μg/kg	9,300	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	μg/kg	39	-- <sup>d</sup>	1.97E+01	-- <sup>d</sup>	--
100-B-18_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	μg/kg	95	-- <sup>d</sup>	1.97E+01	-- <sup>d</sup>	--
100-B-18_Shallow_Focused	non-Rad	Arsenic	7440-38-2	μg/kg	3,000	1.05E+07	1.97E+01	531,188	No
100-B-18_Shallow_Focused	non-Rad	Barium	7440-39-3	μg/kg	1.30E+06	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	μg/kg	250	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	μg/kg	300	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	μg/kg	240	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	μg/kg	100	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Beryllium	7440-41-7	μg/kg	640	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Boron	7440-42-8	μg/kg	34,200	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Cadmium	7440-43-9	μg/kg	13,200	500	1.97E+01	25	Yes
100-B-18_Shallow_Focused	non-Rad	Chromium	7440-47-3	μg/kg	11,300	-- <sup>d</sup>	1.97E+01	-- <sup>d</sup>	--
100-B-18_Shallow_Focused	non-Rad	Chrysene	218-01-9	μg/kg	270	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Cobalt	7440-48-4	μg/kg	8,200	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Copper	7440-50-8	μg/kg	18,900	93,717	1.97E+01	4,757	Yes
100-B-18_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	μg/kg	30	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	μg/kg	300	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Fluorene	86-73-7	μg/kg	530	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	μg/kg	210	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Iron	7439-89-6	μg/kg	2.16E+07	2.61E+07	1.97E+01	1.33E+06	Yes
100-B-18_Shallow_Focused	non-Rad	Lead	7439-92-1	μg/kg	25,300	-- <sup>d</sup>	1.97E+01	-- <sup>d</sup>	--
100-B-18_Shallow_Focused	non-Rad	Manganese	7439-96-5	μg/kg	356,000	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Mercury	7439-97-6	μg/kg	2,200	80,585	1.97E+01	4,091	No
100-B-18_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	μg/kg	960	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Naphthalene	91-20-3	μg/kg	440	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Nickel	7440-02-0	μg/kg	12,100	3.89E+08	1.97E+01	1.97E+07	No
100-B-18_Shallow_Focused	non-Rad	Pyrene	129-00-0	μg/kg	510	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Selenium	7782-49-2	μg/kg	730	1,000	1.97E+01	51	Yes
100-B-18_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	μg/kg	222,000	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	non-Rad	Vanadium	7440-62-2	μg/kg	46,500	-- <sup>c</sup>	1.97E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-18_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	77,600	3.89E+08	1.97E+01	1.97E+07	No
100-B-19_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.90E+06	-- <sup>d</sup>	6.37E+01	-- <sup>d</sup>	--
100-B-19_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	970	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	2,658	1.05E+07	6.37E+01	164,276	No
100-B-19_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	57,930	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	735	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,500	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	38,860	-- <sup>d</sup>	6.37E+01	-- <sup>d</sup>	--
100-B-19_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	9,267	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	17,878	93,717	6.37E+01	1,471	Yes
100-B-19_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	886	6,000 <sup>e</sup>	6.37E+01	6,000 <sup>e</sup>	No
100-B-19_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.37E+07	2.61E+07	6.37E+01	409,888	Yes
100-B-19_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	25,097	-- <sup>d</sup>	6.37E+01	-- <sup>d</sup>	--
100-B-19_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	341,162	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	60	80,585	6.37E+01	1,265	No
100-B-19_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	12,467	3.89E+08	6.37E+01	6.11E+06	No
100-B-19_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	58,736	-- <sup>c</sup>	6.37E+01	-- <sup>c</sup>	--
100-B-19_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	42,877	3.89E+08	6.37E+01	6.11E+06	No
100-B-19_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	8.93E+06	-- <sup>d</sup>	1.64E+01	-- <sup>d</sup>	--
100-B-19_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	1,194	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,880	1.05E+07	1.64E+01	638,073	No
100-B-19_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	97,962	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	313	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	2,381	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	170	500	1.64E+01	30	Yes
100-B-19_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	13,790	-- <sup>d</sup>	1.64E+01	-- <sup>d</sup>	--
100-B-19_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	7,998	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	16,093	93,717	1.64E+01	5,714	Yes
100-B-19_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	190	6,000 <sup>e</sup>	1.64E+01	6,000 <sup>e</sup>	No
100-B-19_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.30E+07	2.61E+07	1.64E+01	1.59E+06	Yes
100-B-19_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	6,415	-- <sup>d</sup>	1.64E+01	-- <sup>d</sup>	--
100-B-19_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	414,775	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	24	80,585	1.64E+01	4,914	No
100-B-19_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	649	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	12,360	3.89E+08	1.64E+01	2.37E+07	No
100-B-19_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	1,280	1,000	1.64E+01	61	Yes
100-B-19_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	53,696	-- <sup>c</sup>	1.64E+01	-- <sup>c</sup>	--
100-B-19_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	47,802	3.89E+08	1.64E+01	2.37E+07	No
100-B-19_Shallow_4	non-Rad	Aluminum	7429-90-5	µg/kg	7.24E+06	-- <sup>d</sup>	3.60E+01	-- <sup>d</sup>	--
100-B-19_Shallow_4	non-Rad	Arsenic	7440-38-2	µg/kg	4,048	1.05E+07	3.60E+01	290,678	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-19_Shallow_4	non-Rad	Barium	7440-39-3	µg/kg	65,972	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Beryllium	7440-41-7	µg/kg	452	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Boron	7440-42-8	µg/kg	2,400	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Cadmium	7440-43-9	µg/kg	122	500	3.60E+01	14	Yes
100-B-19_Shallow_4	non-Rad	Chromium	7440-47-3	µg/kg	11,506	-- <sup>d</sup>	3.60E+01	-- <sup>d</sup>	--
100-B-19_Shallow_4	non-Rad	Cobalt	7440-48-4	µg/kg	6,930	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Copper	7440-50-8	µg/kg	17,321	93,717	3.60E+01	2,603	Yes
100-B-19_Shallow_4	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	420	6,000 <sup>e</sup>	3.60E+01	6,000 <sup>e</sup>	No
100-B-19_Shallow_4	non-Rad	Iron	7439-89-6	µg/kg	1.97E+07	2.61E+07	3.60E+01	725,273	Yes
100-B-19_Shallow_4	non-Rad	Lead	7439-92-1	µg/kg	9,612	-- <sup>d</sup>	3.60E+01	-- <sup>d</sup>	--
100-B-19_Shallow_4	non-Rad	Manganese	7439-96-5	µg/kg	316,396	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Mercury	7439-97-6	µg/kg	15	80,585	3.60E+01	2,238	No
100-B-19_Shallow_4	non-Rad	Molybdenum	7439-98-7	µg/kg	359	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Nickel	7440-02-0	µg/kg	12,262	3.89E+08	3.60E+01	1.08E+07	No
100-B-19_Shallow_4	non-Rad	Vanadium	7440-62-2	µg/kg	44,697	-- <sup>c</sup>	3.60E+01	-- <sup>c</sup>	--
100-B-19_Shallow_4	non-Rad	Zinc	7440-66-6	µg/kg	41,817	3.89E+08	3.60E+01	1.08E+07	No
100-B-19_Shallow_5	non-Rad	Aluminum	7429-90-5	µg/kg	7.69E+06	-- <sup>d</sup>	2.52E+01	-- <sup>d</sup>	--
100-B-19_Shallow_5	non-Rad	Arsenic	7440-38-2	µg/kg	3,076	1.05E+07	2.52E+01	415,254	No
100-B-19_Shallow_5	non-Rad	Barium	7440-39-3	µg/kg	70,260	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Beryllium	7440-41-7	µg/kg	818	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Boron	7440-42-8	µg/kg	2,769	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Cadmium	7440-43-9	µg/kg	322	500	2.52E+01	20	Yes
100-B-19_Shallow_5	non-Rad	Chromium	7440-47-3	µg/kg	10,988	-- <sup>d</sup>	2.52E+01	-- <sup>d</sup>	--
100-B-19_Shallow_5	non-Rad	Cobalt	7440-48-4	µg/kg	9,504	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Copper	7440-50-8	µg/kg	17,154	93,717	2.52E+01	3,719	Yes
100-B-19_Shallow_5	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	236	6,000 <sup>e</sup>	2.52E+01	6,000 <sup>e</sup>	No
100-B-19_Shallow_5	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07	2.61E+07	2.52E+01	1.04E+06	Yes
100-B-19_Shallow_5	non-Rad	Lead	7439-92-1	µg/kg	6,792	-- <sup>d</sup>	2.52E+01	-- <sup>d</sup>	--
100-B-19_Shallow_5	non-Rad	Manganese	7439-96-5	µg/kg	388,836	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Mercury	7439-97-6	µg/kg	6,100	80,585	2.52E+01	3,198	Yes
100-B-19_Shallow_5	non-Rad	Molybdenum	7439-98-7	µg/kg	820	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Nickel	7440-02-0	µg/kg	12,222	3.89E+08	2.52E+01	1.54E+07	No
100-B-19_Shallow_5	non-Rad	Vanadium	7440-62-2	µg/kg	66,151	-- <sup>c</sup>	2.52E+01	-- <sup>c</sup>	--
100-B-19_Shallow_5	non-Rad	Zinc	7440-66-6	µg/kg	48,358	3.89E+08	2.52E+01	1.54E+07	No
100-B-19_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.02E+07	-- <sup>d</sup>	2.19E+02	-- <sup>d</sup>	--
100-B-19_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,500	-- <sup>c</sup>	2.19E+02	-- <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,100	1.05E+07	2.19E+02	47,783	No
100-B-19_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	173,000	-- <sup>c</sup>	2.19E+02	-- <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	1,200	-- <sup>c</sup>	2.19E+02	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-19_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,500	— <sup>c</sup>	2.19E+02	— <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	370	500	2.19E+02	2.3	Yes
100-B-19_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	17,600	— <sup>d</sup>	2.19E+02	— <sup>d</sup>	--
100-B-19_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,000	— <sup>c</sup>	2.19E+02	— <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	22,800	93,717	2.19E+02	428	Yes
100-B-19_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	330	6,000 <sup>e</sup>	2.19E+02	6,000 <sup>e</sup>	No
100-B-19_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	3.96E+07	2.61E+07	2.19E+02	119,223	Yes
100-B-19_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	17,400	— <sup>d</sup>	2.19E+02	— <sup>d</sup>	--
100-B-19_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	376,000	— <sup>c</sup>	2.19E+02	— <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	17,100	80,585	2.19E+02	368	Yes
100-B-19_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,100	— <sup>c</sup>	2.19E+02	— <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,000	3.89E+08	2.19E+02	1.78E+06	No
100-B-19_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	91,300	— <sup>c</sup>	2.19E+02	— <sup>c</sup>	--
100-B-19_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	52,200	3.89E+08	2.19E+02	1.78E+06	No
100-B-20_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.50E+06	— <sup>d</sup>	3.20E+00	— <sup>d</sup>	--
100-B-20_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	8.5	— <sup>d</sup>	3.20E+00	— <sup>d</sup>	--
100-B-20_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,800	1.05E+07	3.20E+00	3.27E+06	No
100-B-20_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	72,700	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	29	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	32	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	35	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	320	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,700	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,100	— <sup>d</sup>	3.20E+00	— <sup>d</sup>	--
100-B-20_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	31	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	11,200	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	43,300	93,717	3.20E+00	29,287	Yes
100-B-20_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	153	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	43	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	21	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.17E+07	2.61E+07	3.20E+00	8.16E+06	Yes
100-B-20_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	20,900	— <sup>d</sup>	3.20E+00	— <sup>d</sup>	--
100-B-20_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	354,000	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	327	80,585	3.20E+00	25,183	No
100-B-20_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	599	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,800	3.89E+08	3.20E+00	1.22E+08	No
100-B-20_Shallow_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	40	— <sup>c</sup>	3.20E+00	— <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	440	1,000	3.20E+00	313	Yes



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot \text{m} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \text{m}\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-20_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,900	-- <sup>c</sup>	3.20E+00	-- <sup>c</sup>	--
100-B-20_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	326,000	3.89E+08	3.20E+00	1.22E+08	No
100-B-21:2_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	9.07E+06	-- <sup>d</sup>	3.30E+01	-- <sup>d</sup>	--
100-B-21:2_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,978	1.05E+07	3.30E+01	317,103	No
100-B-21:2_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	88,995	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	190	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,390	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	310	500	3.30E+01	15	Yes
100-B-21:2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,640	-- <sup>d</sup>	3.30E+01	-- <sup>d</sup>	--
100-B-21:2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,955	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,744	93,717	3.30E+01	2,840	Yes
100-B-21:2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	275	6,000 <sup>e</sup>	3.30E+01	6,000 <sup>e</sup>	No
100-B-21:2_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.37E+07	2.61E+07	3.30E+01	791,207	Yes
100-B-21:2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,454	-- <sup>d</sup>	3.30E+01	-- <sup>d</sup>	--
100-B-21:2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	359,421	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,390	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	16,027	3.89E+08	3.30E+01	1.18E+07	No
100-B-21:2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	21	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	390	826	3.30E+01	25	Yes
100-B-21:2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	49,852	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	43,836	3.89E+08	3.30E+01	1.18E+07	No
100-B-21:2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.075	-- <sup>c</sup>	3.30E+01	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.91E+06	-- <sup>d</sup>	9.20E+00	-- <sup>d</sup>	--
100-B-21:3_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	369	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,247	1.05E+07	9.20E+00	1.14E+06	No
100-B-21:3_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	67,083	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	68	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	27	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	41	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	60	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	341	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,104	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	75	500	9.20E+00	54	Yes
100-B-21:3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,795	-- <sup>d</sup>	9.20E+00	-- <sup>d</sup>	--
100-B-21:3_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	86	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,788	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	17,573	93,717	9.20E+00	10,187	Yes



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-21:3_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	120	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.51E+07	2.61E+07	9.20E+00	2.84E+06	Yes
100-B-21:3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,049	-- <sup>d</sup>	9.20E+00	-- <sup>d</sup>	--
100-B-21:3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	388,389	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	20	80,585	9.20E+00	8,759	No
100-B-21:3_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	379	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,176	3.89E+08	9.20E+00	4.23E+07	No
100-B-21:3_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	83	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	66,201	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	50,545	3.89E+08	9.20E+00	4.23E+07	No
100-B-21:3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.096	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:3_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.16	-- <sup>c</sup>	9.20E+00	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	7.62E+06	-- <sup>d</sup>	2.95E+01	-- <sup>d</sup>	--
100-B-21:4_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	866	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,557	1.05E+07	2.95E+01	354,725	No
100-B-21:4_Shallow	non-Rad	Barium	7440-39-3	µg/kg	63,635	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	286	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,191	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	120	500	2.95E+01	17	Yes
100-B-21:4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	32,036	-- <sup>d</sup>	2.95E+01	-- <sup>d</sup>	--
100-B-21:4_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,438	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Copper	7440-50-8	µg/kg	17,168	93,717	2.95E+01	3,177	Yes
100-B-21:4_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	300	6,000 <sup>e</sup>	2.95E+01	6,000 <sup>e</sup>	No
100-B-21:4_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.58E+07	2.61E+07	2.95E+01	885,079	Yes
100-B-21:4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,140	-- <sup>d</sup>	2.95E+01	-- <sup>d</sup>	--
100-B-21:4_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	363,889	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	47	80,585	2.95E+01	2,732	No
100-B-21:4_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	494	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,084	3.89E+08	2.95E+01	1.32E+07	No
100-B-21:4_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	1,040	1,000	2.95E+01	34	Yes
100-B-21:4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,703	-- <sup>f</sup>	2.95E+01	-- <sup>f</sup>	--
100-B-21:4_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	68,392	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	50,652	3.89E+08	2.95E+01	1.32E+07	No
100-B-21:4_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	45	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.25	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.0	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.049	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.4	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-21:4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-21:4_Shallow	Rad	Uranium-238	U-238	pCi/g	0.57	-- <sup>c</sup>	2.95E+01	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.19E+07	-- <sup>d</sup>	1.26E+02	-- <sup>d</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,080	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,450	1.05E+07	1.26E+02	82,853	No
100-B-22:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	110,000	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	1,700	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	9,230	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,020	500	1.26E+02	4.0	Yes
100-B-22:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	24,800	-- <sup>d</sup>	1.26E+02	-- <sup>d</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	13,000	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	66,700	93,717	1.26E+02	742	Yes
100-B-22:2_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	1,600	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	402	6,000 <sup>e</sup>	1.26E+02	6,000 <sup>e</sup>	No
100-B-22:2_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	4.43E+07	2.61E+07	1.26E+02	206,729	Yes
100-B-22:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	125,000	-- <sup>d</sup>	1.26E+02	-- <sup>d</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	479,000	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	319	80,585	1.26E+02	638	No
100-B-22:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,000	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	21,300	3.89E+08	1.26E+02	3.08E+06	No
100-B-22:2_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	16,400	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,960	826	1.26E+02	6.5	Yes
100-B-22:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	67,600	-- <sup>c</sup>	1.26E+02	-- <sup>c</sup>	--
100-B-22:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	176,000	3.89E+08	1.26E+02	3.08E+06	No
100-B-23_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	200	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.95E+06	-- <sup>d</sup>	1.24E+03	-- <sup>d</sup>	--
100-B-23_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	1,900	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	270	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	5.4	-- <sup>d</sup>	1.24E+03	-- <sup>d</sup>	--
100-B-23_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	21	-- <sup>d</sup>	1.24E+03	-- <sup>d</sup>	--
100-B-23_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,400	1.05E+07	1.24E+03	8,454	No
100-B-23_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	118,000	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	490	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	220	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	270	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	290	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	450	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	210	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	14,100	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	20	-- <sup>c</sup>	1.24E+03	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-23_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,700	500	1.24E+03	0.40	Yes
100-B-23_Shallow_Focused	non-Rad	Carbazole	86-74-8	µg/kg	370	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,000	— <sup>d</sup>	1.24E+03	— <sup>d</sup>	--
100-B-23_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1,400	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,700	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,600	93,717	1.24E+03	76	Yes
100-B-23_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	50	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Dibenzofuran	132-64-9	µg/kg	220	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	31	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	1,600	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	390	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	83	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.07E+07	2.61E+07	1.24E+03	21,094	Yes
100-B-23_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	73,800	— <sup>d</sup>	1.24E+03	— <sup>d</sup>	--
100-B-23_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	8,600	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	352,000	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8,200	80,585	1.24E+03	65	Yes
100-B-23_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	710	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,600	3.89E+08	1.24E+03	314,267	No
100-B-23_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1,200	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	570	1,000	1.24E+03	0.81	Yes
100-B-23_Shallow_Focused	non-Rad	Strontium	7440-24-6	µg/kg	25,100	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	3,200	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	173,000	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,900	— <sup>c</sup>	1.24E+03	— <sup>c</sup>	--
100-B-23_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	1.31E+06	3.89E+08	1.24E+03	314,267	Yes
100-B-25_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	8.14E+06	— <sup>d</sup>	4.80E+01	— <sup>d</sup>	--
100-B-25_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,556	1.05E+07	4.80E+01	218,008	No
100-B-25_Shallow	non-Rad	Barium	7440-39-3	µg/kg	81,242	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	246	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,005	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	97	500	4.80E+01	10	Yes
100-B-25_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	15,581	— <sup>d</sup>	4.80E+01	— <sup>d</sup>	--
100-B-25_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,179	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	non-Rad	Copper	7440-50-8	µg/kg	17,196	93,717	4.80E+01	1,952	Yes
100-B-25_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	164	6,000 <sup>e</sup>	4.80E+01	6,000 <sup>e</sup>	No
100-B-25_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.69E+07	2.61E+07	4.80E+01	543,955	Yes
100-B-25_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,006	— <sup>d</sup>	4.80E+01	— <sup>d</sup>	--
100-B-25_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	281,444	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-25_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	44	80,585	4.80E+01	1,679	No
100-B-25_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	279	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	16,459	3.89E+08	4.80E+01	8.10E+06	No
100-B-25_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,156	— <sup>f</sup>	4.80E+01	— <sup>f</sup>	--
100-B-25_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	37,033	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	35,105	3.89E+08	4.80E+01	8.10E+06	No
100-B-25_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.55	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.1	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	4.5	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.40	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.78	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-25_Shallow	Rad	Uranium-238	U-238	pCi/g	0.72	— <sup>c</sup>	4.80E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.16E+06	— <sup>d</sup>	3.17E+01	— <sup>d</sup>	--
100-B-26_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	1.05E+07	3.17E+01	330,107	No
100-B-26_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	84,700	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	441	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,800	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	501	500	3.17E+01	16	Yes
100-B-26_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	39,300	— <sup>d</sup>	3.17E+01	— <sup>d</sup>	--
100-B-26_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,400	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	20,200	93,717	3.17E+01	2,956	Yes
100-B-26_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	2,020	6,000 <sup>e</sup>	3.17E+01	6,000 <sup>e</sup>	No
100-B-26_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07	2.61E+07	3.17E+01	823,654	Yes
100-B-26_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	17,600	— <sup>d</sup>	3.17E+01	— <sup>d</sup>	--
100-B-26_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	262,000	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	16	80,585	3.17E+01	2,542	No
100-B-26_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	206	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	16,500	3.89E+08	3.17E+01	1.23E+07	No
100-B-26_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	513	1,000	3.17E+01	32	Yes
100-B-26_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,513	— <sup>f</sup>	3.17E+01	— <sup>f</sup>	--
100-B-26_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	33,700	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	108,000	3.89E+08	3.17E+01	1.23E+07	No
100-B-26_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	3.1	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-26_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	— <sup>c</sup>	3.17E+01	— <sup>c</sup>	--
100-B-27_Deep	non-Rad	Aluminum	7429-90-5	µg/kg	1.23E+07	— <sup>d</sup>	4.71E+01	— <sup>d</sup>	--
100-B-27_Deep	non-Rad	Antimony	7440-36-0	µg/kg	464	— <sup>c</sup>	4.71E+01	— <sup>c</sup>	--
100-B-27_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	4,466	1.05E+07	4.71E+01	222,174	No
100-B-27_Deep	non-Rad	Barium	7440-39-3	µg/kg	149,745	— <sup>c</sup>	4.71E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-27_Deep	non-Rad	Beryllium	7440-41-7	µg/kg	436	-- <sup>c</sup>	4.71E+01	-- <sup>c</sup>	--
100-B-27_Deep	non-Rad	Boron	7440-42-8	µg/kg	1,099	-- <sup>c</sup>	4.71E+01	-- <sup>c</sup>	--
100-B-27_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	102	500	4.71E+01	11	Yes
100-B-27_Deep	non-Rad	Chromium	7440-47-3	µg/kg	13,667	-- <sup>d</sup>	4.71E+01	-- <sup>d</sup>	--
100-B-27_Deep	non-Rad	Cobalt	7440-48-4	µg/kg	14,425	-- <sup>c</sup>	4.71E+01	-- <sup>c</sup>	--
100-B-27_Deep	non-Rad	Copper	7440-50-8	µg/kg	28,589	93,717	4.71E+01	1,990	Yes
100-B-27_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	215	6,000 <sup>e</sup>	4.71E+01	6,000 <sup>e</sup>	No
100-B-27_Deep	non-Rad	Iron	7439-89-6	µg/kg	3.61E+07	2.61E+07	4.71E+01	554,349	Yes
100-B-27_Deep	non-Rad	Lead	7439-92-1	µg/kg	7,359	-- <sup>d</sup>	4.71E+01	-- <sup>d</sup>	--
100-B-27_Deep	non-Rad	Manganese	7439-96-5	µg/kg	525,815	-- <sup>c</sup>	4.71E+01	-- <sup>c</sup>	--
100-B-27_Deep	non-Rad	Molybdenum	7439-98-7	µg/kg	471	-- <sup>c</sup>	4.71E+01	-- <sup>c</sup>	--
100-B-27_Deep	non-Rad	Nickel	7440-02-0	µg/kg	15,089	3.89E+08	4.71E+01	8.26E+06	No
100-B-27_Deep	non-Rad	Silver	7440-22-4	µg/kg	208	826	4.71E+01	18	Yes
100-B-27_Deep	non-Rad	Vanadium	7440-62-2	µg/kg	86,865	-- <sup>c</sup>	4.71E+01	-- <sup>c</sup>	--
100-B-27_Deep	non-Rad	Zinc	7440-66-6	µg/kg	69,869	3.89E+08	4.71E+01	8.26E+06	No
100-B-28_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	8.52E+06	-- <sup>d</sup>	2.49E+01	-- <sup>d</sup>	--
100-B-28_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	4,446	1.05E+07	2.49E+01	420,257	No
100-B-28_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	99,189	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	358	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	5,012	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	405	500	2.49E+01	20	Yes
100-B-28_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	11,645	-- <sup>d</sup>	2.49E+01	-- <sup>d</sup>	--
100-B-28_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	10,094	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	21,585	93,717	2.49E+01	3,764	Yes
100-B-28_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	330	6,000 <sup>e</sup>	2.49E+01	6,000 <sup>e</sup>	No
100-B-28_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.68E+07	2.61E+07	2.49E+01	1.05E+06	Yes
100-B-28_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	8,333	-- <sup>d</sup>	2.49E+01	-- <sup>d</sup>	--
100-B-28_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	401,359	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	76	80,585	2.49E+01	3,236	No
100-B-28_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	521	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	13,397	3.89E+08	2.49E+01	1.56E+07	No
100-B-28_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	64,955	-- <sup>c</sup>	2.49E+01	-- <sup>c</sup>	--
100-B-28_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	65,498	3.89E+08	2.49E+01	1.56E+07	No
100-B-28_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	1.06E+07	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-28_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	4,728	1.05E+07	1.93E+01	542,197	No
100-B-28_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	85,885	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	357	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Boron	7440-42-8	µg/kg	2,119	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	507	500	1.93E+01	26	Yes



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-28_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	17,013	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-28_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	11,408	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	18,934	93,717	1.93E+01	4,856	Yes
100-B-28_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	200	6,000 <sup>e</sup>	1.93E+01	6,000 <sup>e</sup>	No
100-B-28_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.58E+07	2.61E+07	1.93E+01	1.35E+06	Yes
100-B-28_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	7,178	-- <sup>d</sup>	1.93E+01	-- <sup>d</sup>	--
100-B-28_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	524,239	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	163	80,585	1.93E+01	4,175	No
100-B-28_Shallow_3	non-Rad	Molybdenum	7439-98-7	µg/kg	370	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	17,186	3.89E+08	1.93E+01	2.02E+07	No
100-B-28_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	64,702	-- <sup>c</sup>	1.93E+01	-- <sup>c</sup>	--
100-B-28_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	572,012	3.89E+08	1.93E+01	2.02E+07	No
100-B-28_Shallow_5	non-Rad	Aluminum	7429-90-5	µg/kg	8.80E+06	-- <sup>d</sup>	2.20E+01	-- <sup>d</sup>	--
100-B-28_Shallow_5	non-Rad	Antimony	7440-36-0	µg/kg	899	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Arsenic	7440-38-2	µg/kg	4,877	1.05E+07	2.20E+01	475,654	No
100-B-28_Shallow_5	non-Rad	Barium	7440-39-3	µg/kg	73,328	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Beryllium	7440-41-7	µg/kg	324	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Boron	7440-42-8	µg/kg	1,868	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Cadmium	7440-43-9	µg/kg	234	500	2.20E+01	23	Yes
100-B-28_Shallow_5	non-Rad	Chromium	7440-47-3	µg/kg	19,369	-- <sup>d</sup>	2.20E+01	-- <sup>d</sup>	--
100-B-28_Shallow_5	non-Rad	Cobalt	7440-48-4	µg/kg	9,470	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Copper	7440-50-8	µg/kg	19,492	93,717	2.20E+01	4,260	Yes
100-B-28_Shallow_5	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	190	6,000 <sup>e</sup>	2.20E+01	6,000 <sup>e</sup>	No
100-B-28_Shallow_5	non-Rad	Iron	7439-89-6	µg/kg	2.50E+07	2.61E+07	2.20E+01	1.19E+06	Yes
100-B-28_Shallow_5	non-Rad	Lead	7439-92-1	µg/kg	12,508	-- <sup>d</sup>	2.20E+01	-- <sup>d</sup>	--
100-B-28_Shallow_5	non-Rad	Manganese	7439-96-5	µg/kg	389,598	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Mercury	7439-97-6	µg/kg	77	80,585	2.20E+01	3,663	No
100-B-28_Shallow_5	non-Rad	Molybdenum	7439-98-7	µg/kg	775	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Nickel	7440-02-0	µg/kg	14,338	3.89E+08	2.20E+01	1.77E+07	No
100-B-28_Shallow_5	non-Rad	Vanadium	7440-62-2	µg/kg	58,291	-- <sup>c</sup>	2.20E+01	-- <sup>c</sup>	--
100-B-28_Shallow_5	non-Rad	Zinc	7440-66-6	µg/kg	51,942	3.89E+08	2.20E+01	1.77E+07	No
100-B-28_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.85E+07	-- <sup>d</sup>	1.51E+02	-- <sup>d</sup>	--
100-B-28_Shallow_Focused	non-Rad	Anthracene	120-12-7	µg/kg	1.9	-- <sup>c</sup>	1.51E+02	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,000	-- <sup>c</sup>	1.51E+02	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	8,020	1.05E+07	1.51E+02	69,485	No
100-B-28_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	98,100	-- <sup>c</sup>	1.51E+02	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	47	-- <sup>c</sup>	1.51E+02	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	60	-- <sup>c</sup>	1.51E+02	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	82	-- <sup>c</sup>	1.51E+02	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-28_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	31	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	572	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,710	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	141	500	1.51E+02	3.3	Yes
100-B-28_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	50,100	— <sup>d</sup>	1.51E+02	— <sup>d</sup>	--
100-B-28_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	37	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,600	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	31,000	93,717	1.51E+02	622	Yes
100-B-28_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	8.0	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	101	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Fluorene	86-73-7	µg/kg	1.0	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	280	6,000 <sup>e</sup>	1.51E+02	6,000 <sup>e</sup>	No
100-B-28_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	48	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.69E+07	2.61E+07	1.51E+02	173,372	Yes
100-B-28_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,700	— <sup>d</sup>	1.51E+02	— <sup>d</sup>	--
100-B-28_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	494,000	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	804	80,585	1.51E+02	535	Yes
100-B-28_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	566	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	17,200	3.89E+08	1.51E+02	2.58E+06	No
100-B-28_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	34	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	106,000	— <sup>c</sup>	1.51E+02	— <sup>c</sup>	--
100-B-28_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	81,700	3.89E+08	1.51E+02	2.58E+06	No
100-B-31_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	7.24E+06	— <sup>d</sup>	1.51E+01	— <sup>d</sup>	--
100-B-31_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,096	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,007	1.05E+07	1.51E+01	693,006	No
100-B-31_Shallow	non-Rad	Barium	7440-39-3	µg/kg	66,123	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	263	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,934	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	159	500	1.51E+01	33	Yes
100-B-31_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	17,815	— <sup>d</sup>	1.51E+01	— <sup>d</sup>	--
100-B-31_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	8,635	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Copper	7440-50-8	µg/kg	30,009	93,717	1.51E+01	6,206	Yes
100-B-31_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	173	6,000 <sup>e</sup>	1.51E+01	6,000 <sup>e</sup>	No
100-B-31_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.37E+07	2.61E+07	1.51E+01	1.73E+06	Yes
100-B-31_Shallow	non-Rad	Lead	7439-92-1	µg/kg	78,974	— <sup>d</sup>	1.51E+01	— <sup>d</sup>	--
100-B-31_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	376,677	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	112	80,585	1.51E+01	5,337	No
100-B-31_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	4,483	— <sup>c</sup>	1.51E+01	— <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,098	3.89E+08	1.51E+01	2.58E+07	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-31_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	856	1,000	1.51E+01	66	Yes
100-B-31_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	55,070	-- <sup>c</sup>	1.51E+01	-- <sup>c</sup>	--
100-B-31_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	63,292	3.89E+08	1.51E+01	2.58E+07	No
100-B-32_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.52	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.07E+07	-- <sup>d</sup>	4.20E+00	-- <sup>d</sup>	--
100-B-33_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,550	1.05E+07	4.20E+00	2.49E+06	No
100-B-33_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	102,000	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	408	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	4,670	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	133	500	4.20E+00	119	Yes
100-B-33_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	13,100	-- <sup>d</sup>	4.20E+00	-- <sup>d</sup>	--
100-B-33_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,710	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,500	93,717	4.20E+00	22,314	No
100-B-33_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.47E+07	2.61E+07	4.20E+00	6.22E+06	Yes
100-B-33_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,870	-- <sup>d</sup>	4.20E+00	-- <sup>d</sup>	--
100-B-33_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	409,000	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	12	80,585	4.20E+00	19,187	No
100-B-33_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,200	3.89E+08	4.20E+00	9.26E+07	No
100-B-33_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	898	1,000	4.20E+00	238	Yes
100-B-33_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,447	-- <sup>f</sup>	4.20E+00	-- <sup>f</sup>	--
100-B-33_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	58,200	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	48,700	3.89E+08	4.20E+00	9.26E+07	No
100-B-33_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.13	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-33_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.49	-- <sup>c</sup>	4.20E+00	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.39E+07	-- <sup>d</sup>	2.22E+01	-- <sup>d</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,300	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	26	-- <sup>d</sup>	2.22E+01	-- <sup>d</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	9,600	1.05E+07	2.22E+01	471,369	No
100-B-35:1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	81,600	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	280	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,500	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	220	500	2.22E+01	23	Yes
100-B-35:1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,300	-- <sup>d</sup>	2.22E+01	-- <sup>d</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,900	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,200	93,717	2.22E+01	4,221	Yes
100-B-35:1_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.19E+07	2.61E+07	2.22E+01	1.18E+06	Yes
100-B-35:1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,200	-- <sup>d</sup>	2.22E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-35:1_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	502,000	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	17,500	3.89E+08	2.22E+01	1.75E+07	No
100-B-35:1_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	55,000	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESEEXT	µg/kg	58,000	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	72,200	-- <sup>c</sup>	2.22E+01	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	59,900	3.89E+08	2.22E+01	1.75E+07	No
100-B-35:1_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06	-- <sup>d</sup>	1.22E+02	-- <sup>d</sup>	--
100-B-35:1_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,061	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	7.4	-- <sup>d</sup>	1.22E+02	-- <sup>d</sup>	--
100-B-35:1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3.0	-- <sup>d</sup>	1.22E+02	-- <sup>d</sup>	--
100-B-35:1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,148	1.05E+07	1.22E+02	85,774	No
100-B-35:1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	64,766	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	15	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	17	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	65	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	10	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	126	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,423	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	151	500	1.22E+02	4.1	Yes
100-B-35:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,942	-- <sup>d</sup>	1.22E+02	-- <sup>d</sup>	--
100-B-35:1_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	13	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,325	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	19,504	93,717	1.22E+02	768	Yes
100-B-35:1_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	17	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	26	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.49E+07	2.61E+07	1.22E+02	214,015	Yes
100-B-35:1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,650	-- <sup>d</sup>	1.22E+02	-- <sup>d</sup>	--
100-B-35:1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	368,864	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	14	80,585	1.22E+02	661	No
100-B-35:1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	370	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,876	3.89E+08	1.22E+02	3.19E+06	No
100-B-35:1_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	15	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	9,369	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range extended to C36	TPHDIESEEXT	µg/kg	11,859	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	61,150	-- <sup>c</sup>	1.22E+02	-- <sup>c</sup>	--
100-B-35:1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	62,837	3.89E+08	1.22E+02	3.19E+06	No
100-B-35:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.35E+06	-- <sup>d</sup>	1.59E+01	-- <sup>d</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	3,570	-- <sup>c</sup>	1.59E+01	-- <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	42	-- <sup>d</sup>	1.59E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-35:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	1,620	1.05E+07	1.59E+01	658,138	No
100-B-35:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	51,600	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	67	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	77	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	74	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	41	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	318	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	11,500	— <sup>d</sup>	1.59E+01	— <sup>d</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	54	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,460	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,800	93,717	1.59E+01	5,894	Yes
100-B-35:2_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	7.7	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	63	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	63	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.58E+07	2.61E+07	1.59E+01	1.64E+06	Yes
100-B-35:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	12,700	— <sup>d</sup>	1.59E+01	— <sup>d</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	234,000	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	9.3	80,585	1.59E+01	5,068	No
100-B-35:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	9,660	3.89E+08	1.59E+01	2.45E+07	No
100-B-35:2_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	62	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	569	826	1.59E+01	52	Yes
100-B-35:2_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	3,580	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	19,300	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,400	— <sup>c</sup>	1.59E+01	— <sup>c</sup>	--
100-B-35:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	158,000	3.89E+08	1.59E+01	2.45E+07	No
100-B-5_Deep	non-Rad	Chromium	7440-47-3	µg/kg	297,000	— <sup>d</sup>	2.76E+01	— <sup>d</sup>	--
100-B-5_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,940	6,000 <sup>e</sup>	2.76E+01	6,000 <sup>e</sup>	No
100-B-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	8,200	— <sup>d</sup>	2.76E+01	— <sup>d</sup>	--
100-B-5_Deep	non-Rad	Mercury	7439-97-6	µg/kg	5,040	80,585	2.76E+01	2,920	Yes
100-B-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,230	— <sup>f</sup>	2.76E+01	— <sup>f</sup>	--
100-B-5_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.97	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Cesium-137	10045-97-3	pCi/g	22	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	1.5	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Europium-152	14683-23-9	pCi/g	15	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Europium-154	15585-10-1	pCi/g	1.4	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.26	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	3.4	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Total beta radiostromtium	SR-RAD	pCi/g	1.9	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--
100-B-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.79	— <sup>c</sup>	2.76E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-5_Deep	Rad	Uranium-238	U-238	pCi/g	0.75	-- <sup>c</sup>	2.76E+01	-- <sup>c</sup>	--
100-B-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,803	-- <sup>d</sup>	5.22E+01	-- <sup>d</sup>	--
100-B-5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,958	-- <sup>d</sup>	5.22E+01	-- <sup>d</sup>	--
100-B-5_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	17	80,585	5.22E+01	1,544	No
100-B-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,870	-- <sup>f</sup>	5.22E+01	-- <sup>f</sup>	--
100-B-5_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.11	-- <sup>c</sup>	5.22E+01	-- <sup>c</sup>	--
100-B-5_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.35	-- <sup>c</sup>	5.22E+01	-- <sup>c</sup>	--
100-B-5_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	-- <sup>c</sup>	5.22E+01	-- <sup>c</sup>	--
100-B-5_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.088	-- <sup>c</sup>	5.22E+01	-- <sup>c</sup>	--
100-B-5_Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	-- <sup>c</sup>	5.22E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	non-Rad	Chromium	7440-47-3	µg/kg	55,800	-- <sup>d</sup>	2.89E+01	-- <sup>d</sup>	--
100-B-8:1_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	483	6,000 <sup>e</sup>	2.89E+01	6,000 <sup>e</sup>	No
100-B-8:1_Deep	non-Rad	Lead	7439-92-1	µg/kg	7,764	-- <sup>d</sup>	2.89E+01	-- <sup>d</sup>	--
100-B-8:1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	237	80,585	2.89E+01	2,788	No
100-B-8:1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,774	-- <sup>f</sup>	2.89E+01	-- <sup>f</sup>	--
100-B-8:1_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.44	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	9.6	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.16	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Europium-152	14683-23-9	pCi/g	2.7	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Europium-154	15585-10-1	pCi/g	0.16	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.75	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	2.3	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.66	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Deep	Rad	Uranium-238	U-238	pCi/g	0.60	-- <sup>c</sup>	2.89E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	16,055	-- <sup>d</sup>	4.86E+01	-- <sup>d</sup>	--
100-B-8:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	286	6,000 <sup>e</sup>	4.86E+01	6,000 <sup>e</sup>	No
100-B-8:1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	37,866	-- <sup>d</sup>	4.86E+01	-- <sup>d</sup>	--
100-B-8:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	48	80,585	4.86E+01	1,658	No
100-B-8:1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,792	-- <sup>f</sup>	4.86E+01	-- <sup>f</sup>	--
100-B-8:1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.20	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.29	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.069	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.32	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.037	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.55	-- <sup>c</sup>	4.86E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	non-Rad	Chromium	7440-47-3	µg/kg	65,806	-- <sup>d</sup>	1.92E+01	-- <sup>d</sup>	--
100-B-8:2_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,989	6,000 <sup>e</sup>	1.92E+01	6,000 <sup>e</sup>	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (μg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (μg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-8:2_Deep	non-Rad	Lead	7439-92-1	μg/kg	4,278	-- <sup>d</sup>	1.92E+01	-- <sup>d</sup>	--
100-B-8:2_Deep	non-Rad	Mercury	7439-97-6	μg/kg	145	80,585	1.92E+01	4,197	No
100-B-8:2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	1,590	-- <sup>f</sup>	1.92E+01	-- <sup>f</sup>	--
100-B-8:2_Deep	Rad	Americium-241	14596-10-2	pCi/g	1.1	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	13	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.56	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Europium-152	14683-23-9	pCi/g	5.1	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Europium-154	15585-10-1	pCi/g	0.99	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.76	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	2.7	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Deep	Rad	Uranium-238	U-238	pCi/g	0.53	-- <sup>c</sup>	1.92E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	non-Rad	Chromium	7440-47-3	μg/kg	16,449	-- <sup>d</sup>	3.09E+01	-- <sup>d</sup>	--
100-B-8:2_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	μg/kg	555	6,000 <sup>e</sup>	3.09E+01	6,000 <sup>e</sup>	No
100-B-8:2_Shallow_1	non-Rad	Lead	7439-92-1	μg/kg	5,532	-- <sup>d</sup>	3.09E+01	-- <sup>d</sup>	--
100-B-8:2_Shallow_1	non-Rad	Mercury	7439-97-6	μg/kg	23	80,585	3.09E+01	2,608	No
100-B-8:2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	1,664	-- <sup>f</sup>	3.09E+01	-- <sup>f</sup>	--
100-B-8:2_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.28	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.62	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.095	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Europium-152	14683-23-9	pCi/g	0.32	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Europium-154	15585-10-1	pCi/g	0.38	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.36	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.6	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.56	-- <sup>c</sup>	3.09E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_3	non-Rad	Chromium	7440-47-3	μg/kg	15,897	-- <sup>d</sup>	4.97E+01	-- <sup>d</sup>	--
100-B-8:2_Shallow_3	non-Rad	Lead	7439-92-1	μg/kg	4,150	-- <sup>d</sup>	4.97E+01	-- <sup>d</sup>	--
100-B-8:2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	1,729	-- <sup>f</sup>	4.97E+01	-- <sup>f</sup>	--
100-B-8:2_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.55	-- <sup>c</sup>	4.97E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_3	Rad	Europium-152	14683-23-9	pCi/g	0.56	-- <sup>c</sup>	4.97E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_3	Rad	Nickel-63	13981-37-8	pCi/g	3.6	-- <sup>c</sup>	4.97E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_3	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.8	-- <sup>c</sup>	4.97E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	-- <sup>c</sup>	4.97E+01	-- <sup>c</sup>	--
100-B-8:2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	0.58	-- <sup>c</sup>	4.97E+01	-- <sup>c</sup>	--
100-C-3_Shallow	non-Rad	Acetone	67-64-1	μg/kg	3.2	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-3_Shallow	non-Rad	Arsenic	7440-38-2	μg/kg	2,500	1.05E+07	8.60E+00	1.22E+06	No
100-C-3_Shallow	non-Rad	Barium	7440-39-3	μg/kg	62,500	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot \text{m} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \text{m}\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	269	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-3_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	278	500	8.60E+00	58	Yes
100-C-3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,500	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
100-C-3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,000	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
100-C-3_Shallow	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	16	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-3_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g}/\text{kg}$	487	1,000	8.60E+00	116	Yes
100-C-3_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	112	826	8.60E+00	96	Yes
100-C-3_Shallow	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	9.1	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,084	-- <sup>f</sup>	8.60E+00	-- <sup>f</sup>	--
100-C-3_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.15	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-3_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.71	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-3_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.70	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.17E+06	-- <sup>d</sup>	3.57E+01	-- <sup>d</sup>	--
100-C-7_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,692	1.05E+07	3.57E+01	293,120	No
100-C-7_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	57,480	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	288	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,157	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	92	500	3.57E+01	14	Yes
100-C-7_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,051	-- <sup>d</sup>	3.57E+01	-- <sup>d</sup>	--
100-C-7_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,957	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,161	93,717	3.57E+01	2,625	Yes
100-C-7_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.27E+07	2.61E+07	3.57E+01	731,368	Yes
100-C-7_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,444	-- <sup>d</sup>	3.57E+01	-- <sup>d</sup>	--
100-C-7_Shallow_1	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	331,459	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	179	80,585	3.57E+01	2,257	No
100-C-7_Shallow_1	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	447	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,443	3.89E+08	3.57E+01	1.09E+07	No
100-C-7_Shallow_1	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	63,129	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
100-C-7_Shallow_1	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	46,026	3.89E+08	3.57E+01	1.09E+07	No
100-C-7_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	3.74E+06	-- <sup>d</sup>	3.59E+01	-- <sup>d</sup>	--
100-C-7_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	1,398	1.05E+07	3.59E+01	291,487	No
100-C-7_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	44,286	-- <sup>c</sup>	3.59E+01	-- <sup>c</sup>	--
100-C-7_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	188	-- <sup>c</sup>	3.59E+01	-- <sup>c</sup>	--
100-C-7_Shallow_2	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	73	500	3.59E+01	14	Yes
100-C-7_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	2,573	-- <sup>d</sup>	3.59E+01	-- <sup>d</sup>	--
100-C-7_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	7,736	-- <sup>c</sup>	3.59E+01	-- <sup>c</sup>	--
100-C-7_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	14,385	93,717	3.59E+01	2,611	Yes
100-C-7_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.23E+07	2.61E+07	3.59E+01	727,294	Yes
100-C-7_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	2,259	-- <sup>d</sup>	3.59E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-7_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	264,954	— <sup>c</sup>	3.59E+01	— <sup>c</sup>	--
100-C-7_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	328	— <sup>c</sup>	3.59E+01	— <sup>c</sup>	--
100-C-7_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	5,081	3.89E+08	3.59E+01	1.08E+07	No
100-C-7_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	58,819	— <sup>c</sup>	3.59E+01	— <sup>c</sup>	--
100-C-7_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	37,568	3.89E+08	3.59E+01	1.08E+07	No
100-C-7:1_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	8.10E+06	— <sup>d</sup>	5.54E+01	— <sup>d</sup>	--
100-C-7:1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,482	1.05E+07	5.54E+01	188,888	No
100-C-7:1_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	63,124	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	295	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,608	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	84	500	5.54E+01	9.0	Yes
100-C-7:1_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,876	— <sup>d</sup>	5.54E+01	— <sup>d</sup>	--
100-C-7:1_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	8,282	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	15,632	93,717	5.54E+01	1,692	Yes
100-C-7:1_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.24E+07	2.61E+07	5.54E+01	471,297	Yes
100-C-7:1_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	5,004	— <sup>d</sup>	5.54E+01	— <sup>d</sup>	--
100-C-7:1_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	343,222	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	24	80,585	5.54E+01	1,455	No
100-C-7:1_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	373	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	10,250	3.89E+08	5.54E+01	7.02E+06	No
100-C-7:1_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	61,594	— <sup>c</sup>	5.54E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	44,300	3.89E+08	5.54E+01	7.02E+06	No
100-C-7:1_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	4.54E+06	— <sup>d</sup>	5.16E+01	— <sup>d</sup>	--
100-C-7:1_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	1,420	1.05E+07	5.16E+01	202,798	No
100-C-7:1_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	57,186	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	212	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	633	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	45	500	5.16E+01	9.7	Yes
100-C-7:1_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	3,298	— <sup>d</sup>	5.16E+01	— <sup>d</sup>	--
100-C-7:1_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	7,114	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	12,752	93,717	5.16E+01	1,816	Yes
100-C-7:1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	620	6,000 <sup>e</sup>	5.16E+01	6,000 <sup>e</sup>	No
100-C-7:1_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.03E+07	2.61E+07	5.16E+01	506,005	Yes
100-C-7:1_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	1,807	— <sup>d</sup>	5.16E+01	— <sup>d</sup>	--
100-C-7:1_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	292,818	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	315	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	5,395	3.89E+08	5.16E+01	7.54E+06	No
100-C-7:1_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	55,467	— <sup>c</sup>	5.16E+01	— <sup>c</sup>	--
100-C-7:1_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	36,539	3.89E+08	5.16E+01	7.54E+06	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-7:1_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	7.89E+06	-- <sup>d</sup>	1.04E+02	-- <sup>d</sup>	--
100-C-7:1_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	2,617	1.05E+07	1.04E+02	101,105	No
100-C-7:1_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	73,483	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	298	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Boron	7440-42-8	µg/kg	1,770	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	152	500	1.04E+02	4.8	Yes
100-C-7:1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	11,331	-- <sup>d</sup>	1.04E+02	-- <sup>d</sup>	--
100-C-7:1_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	9,644	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	18,845	93,717	1.04E+02	905	Yes
100-C-7:1_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.84E+07	2.61E+07	1.04E+02	252,269	Yes
100-C-7:1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	4,032	-- <sup>d</sup>	1.04E+02	-- <sup>d</sup>	--
100-C-7:1_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	358,358	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	12	80,585	1.04E+02	779	No
100-C-7:1_Shallow_3	non-Rad	Molybdenum	7439-98-7	µg/kg	645	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	10,337	3.89E+08	1.04E+02	3.76E+06	No
100-C-7:1_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	81,618	-- <sup>c</sup>	1.04E+02	-- <sup>c</sup>	--
100-C-7:1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	50,985	3.89E+08	1.04E+02	3.76E+06	No
100-C-9:1_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	3.88E+06	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	430	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	1.05E+07	2.00E+00	5.23E+06	No
100-C-9:1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	46,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	1,800	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	2,900	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	60	500	2.00E+00	250	No
100-C-9:1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,100	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,100	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	37,300	93,717	2.00E+00	46,859	No
100-C-9:1_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,700	6,000 <sup>e</sup>	2.00E+00	6,000 <sup>e</sup>	No
100-C-9:1_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.69E+07	2.61E+07	2.00E+00	1.31E+07	Yes
100-C-9:1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	15,300	-- <sup>d</sup>	2.00E+00	-- <sup>d</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Lithium	7439-93-2	µg/kg	3,400	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	311,000	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	2,900	80,585	2.00E+00	40,293	No
100-C-9:1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	620	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	6,800	3.89E+08	2.00E+00	1.95E+08	No
100-C-9:1_Deep_Focused	non-Rad	Strontium	7440-24-6	µg/kg	18,200	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Tin	7440-31-5	µg/kg	4,500	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	66,300	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	47,600	3.89E+08	2.00E+00	1.95E+08	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-9:1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.15	-- <sup>c</sup>	2.00E+00	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	470	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,304	1.05E+07	1.12E+02	93,432	No
100-C-9:1_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	68,483	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	328	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	836	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	145	500	1.12E+02	4.5	Yes
100-C-9:1_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,505	-- <sup>d</sup>	1.12E+02	-- <sup>d</sup>	--
100-C-9:1_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	8,098	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	16,720	93,717	1.12E+02	837	Yes
100-C-9:1_Shallow_1	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	421	6,000 <sup>e</sup>	1.12E+02	6,000 <sup>e</sup>	No
100-C-9:1_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	4,050	-- <sup>d</sup>	1.12E+02	-- <sup>d</sup>	--
100-C-9:1_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	316,608	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	44	80,585	1.12E+02	720	No
100-C-9:1_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	424	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	10,764	3.89E+08	1.12E+02	3.47E+06	No
100-C-9:1_Shallow_1	non-Rad	Selenium	7782-49-2	µg/kg	474	1,000	1.12E+02	8.9	Yes
100-C-9:1_Shallow_1	non-Rad	Silver	7440-22-4	µg/kg	81	826	1.12E+02	7.4	Yes
100-C-9:1_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	46,252	-- <sup>c</sup>	1.12E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	40,749	3.89E+08	1.12E+02	3.47E+06	No
100-C-9:1_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	6.76E+06	-- <sup>d</sup>	2.61E+01	-- <sup>d</sup>	--
100-C-9:1_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	513	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	4,983	1.05E+07	2.61E+01	400,935	No
100-C-9:1_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	75,252	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	398	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	1,235	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	260	500	2.61E+01	19	Yes
100-C-9:1_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	16,359	-- <sup>d</sup>	2.61E+01	-- <sup>d</sup>	--
100-C-9:1_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	9,787	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	18,114	93,717	2.61E+01	3,591	Yes
100-C-9:1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	426	6,000 <sup>e</sup>	2.61E+01	6,000 <sup>e</sup>	No
100-C-9:1_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.35E+07	2.61E+07	2.61E+01	1.00E+06	Yes
100-C-9:1_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	6,459	-- <sup>d</sup>	2.61E+01	-- <sup>d</sup>	--
100-C-9:1_Shallow_2	non-Rad	Lithium	7439-93-2	µg/kg	8,109	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	402,742	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	1,886	80,585	2.61E+01	3,088	No
100-C-9:1_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	367	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	12,476	3.89E+08	2.61E+01	1.49E+07	No
100-C-9:1_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	28,900	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-9:1_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	3,100	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	49,792	-- <sup>c</sup>	2.61E+01	-- <sup>c</sup>	--
100-C-9:1_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	48,244	3.89E+08	2.61E+01	1.49E+07	No
100-C-9:1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,200	1.05E+07	3.49E+02	30,010	No
100-C-9:1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	162,000	-- <sup>c</sup>	3.49E+02	-- <sup>c</sup>	--
100-C-9:1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	340	500	3.49E+02	1.4	Yes
100-C-9:1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	17,300	-- <sup>d</sup>	3.49E+02	-- <sup>d</sup>	--
100-C-9:1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	396	6,000 <sup>e</sup>	3.49E+02	6,000 <sup>e</sup>	No
100-C-9:1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,900	-- <sup>d</sup>	3.49E+02	-- <sup>d</sup>	--
100-C-9:1_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	430	1,000	3.49E+02	2.9	Yes
100-C-9:2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	1.2	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	5.49E+06	-- <sup>d</sup>	1.17E+01	-- <sup>d</sup>	--
100-C-9:2_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	21	-- <sup>d</sup>	1.17E+01	-- <sup>d</sup>	--
100-C-9:2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,827	1.05E+07	1.17E+01	894,393	No
100-C-9:2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	62,909	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	41	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	48	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	41	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	45	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	454	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	258	500	1.17E+01	43	Yes
100-C-9:2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,580	-- <sup>d</sup>	1.17E+01	-- <sup>d</sup>	--
100-C-9:2_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	55	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	7,997	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,494	93,717	1.17E+01	8,010	Yes
100-C-9:2_Shallow	non-Rad	Dieldrin	60-57-1	µg/kg	1.7	58	1.17E+01	4.9	No
100-C-9:2_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	81	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	324	6,000 <sup>e</sup>	1.17E+01	6,000 <sup>e</sup>	No
100-C-9:2_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	29	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.94E+07	2.61E+07	1.17E+01	2.23E+06	Yes
100-C-9:2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	13,131	-- <sup>d</sup>	1.17E+01	-- <sup>d</sup>	--
100-C-9:2_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	6,540	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	341,053	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	40	80,585	1.17E+01	6,888	No
100-C-9:2_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	418	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,637	3.89E+08	1.17E+01	3.32E+07	No
100-C-9:2_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	94	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Strontium	7440-24-6	µg/kg	22,407	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--
100-C-9:2_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,900	-- <sup>c</sup>	1.17E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-9:2_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	263,884	3.89E+08	1.17E+01	3.32E+07	No
100-C-9:2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.13	— <sup>c</sup>	1.17E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	µg/kg	3.5	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	14	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	5.1	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.30E+06	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	970	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	120	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	11	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,400	1.05E+07	1.48E+01	707,054	No
100-C-9:2_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	74,100	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	22	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	73	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	23	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	510	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	250	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	5,100	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	500	500	1.48E+01	34	Yes
100-C-9:2_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	1.6	24,442	1.48E+01	1,651	No
100-C-9:2_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,500	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	82	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,900	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	66,100	93,717	1.48E+01	6,332	Yes
100-C-9:2_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	40	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	0.64	4.2	1.48E+01	0.28	Yes
100-C-9:2_Shallow_Focused	non-Rad	Endrin	72-20-8	µg/kg	3.6	3.0	1.48E+01	0.20	Yes
100-C-9:2_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	830	6,000 <sup>e</sup>	1.48E+01	6,000 <sup>e</sup>	No
100-C-9:2_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.18E+07	2.61E+07	1.48E+01	1.76E+06	Yes
100-C-9:2_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	152,000	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	7,200	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	456,000	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	850	80,585	1.48E+01	5,445	No
100-C-9:2_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	7.3	— <sup>d</sup>	1.48E+01	— <sup>d</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,900	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	22,000	3.89E+08	1.48E+01	2.63E+07	No
100-C-9:2_Shallow_Focused	non-Rad	Strontium	7440-24-6	µg/kg	32,700	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	58,400	— <sup>c</sup>	1.48E+01	— <sup>c</sup>	--
100-C-9:2_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	111,000	3.89E+08	1.48E+01	2.63E+07	No
100-C-9:3_Deep_Focused	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	1,100	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
100-C-9:3_Deep_Focused	non-Rad	Acenaphthene	83-32-9	$\mu\text{g}/\text{kg}$	6,800	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.51E+06	— <sup>d</sup>	2.00E+00	— <sup>d</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	13,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	2,100	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	6,500	1.05E+07	2.00E+00	5.23E+06	No
100-C-9:3_Deep_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	66,700	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	20,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	13,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	11,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	12,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	330	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,300	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	200	500	2.00E+00	250	No
100-C-9:3_Deep_Focused	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	7,300	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	12,800	— <sup>d</sup>	2.00E+00	— <sup>d</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	20,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,200	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	19,600	93,717	2.00E+00	46,859	No
100-C-9:3_Deep_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	2,200	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Dibenzofuran	132-64-9	$\mu\text{g}/\text{kg}$	3,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	52,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Fluorene	86-73-7	$\mu\text{g}/\text{kg}$	5,800	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	610	6,000 <sup>e</sup>	2.00E+00	6,000 <sup>e</sup>	No
100-C-9:3_Deep_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	5,600	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.55E+07	2.61E+07	2.00E+00	1.31E+07	Yes
100-C-9:3_Deep_Focused	non-Rad	Isophorone	78-59-1	$\mu\text{g}/\text{kg}$	280	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,300	— <sup>d</sup>	2.00E+00	— <sup>d</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	412,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	640	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	2,100	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	14,500	3.89E+08	2.00E+00	1.95E+08	No
100-C-9:3_Deep_Focused	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	35,000	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	140	826	2.00E+00	413	No
100-C-9:3_Deep_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	63,900	— <sup>c</sup>	2.00E+00	— <sup>c</sup>	--
100-C-9:3_Deep_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	54,900	3.89E+08	2.00E+00	1.95E+08	No
116-B-1_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	16,456	— <sup>d</sup>	2.00E+01	— <sup>d</sup>	--
116-B-1_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	363	6,000 <sup>e</sup>	2.00E+01	6,000 <sup>e</sup>	No
116-B-1_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,795	— <sup>d</sup>	2.00E+01	— <sup>d</sup>	--
116-B-1_Deep	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	80,585	2.00E+01	4,029	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,834	-- <sup>f</sup>	2.00E+01	-- <sup>f</sup>	--
116-B-1_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.052	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	3.1	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.17	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Europium-152	14683-23-9	pCi/g	7.1	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Europium-154	15585-10-1	pCi/g	0.36	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.22	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.4	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.1	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.045	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Deep	Rad	Uranium-238	U-238	pCi/g	0.95	-- <sup>c</sup>	2.00E+01	-- <sup>c</sup>	--
116-B-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,550	-- <sup>d</sup>	1.08E+01	-- <sup>d</sup>	--
116-B-1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,613	6,000 <sup>e</sup>	1.08E+01	6,000 <sup>e</sup>	No
116-B-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,699	-- <sup>d</sup>	1.08E+01	-- <sup>d</sup>	--
116-B-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	19	80,585	1.08E+01	7,462	No
116-B-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,247	-- <sup>f</sup>	1.08E+01	-- <sup>f</sup>	--
116-B-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.19	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.11	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.75	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-1_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.18	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.031	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.72	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	-- <sup>c</sup>	1.08E+01	-- <sup>c</sup>	--
116-B-10_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	23,800	-- <sup>d</sup>	8.40E+00	-- <sup>d</sup>	--
116-B-10_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,000	-- <sup>d</sup>	8.40E+00	-- <sup>d</sup>	--
116-B-10_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	1,300	80,585	8.40E+00	9,593	No
116-B-10_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,122	-- <sup>f</sup>	8.40E+00	-- <sup>f</sup>	--
116-B-10_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.034	-- <sup>c</sup>	8.40E+00	-- <sup>c</sup>	--
116-B-10_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.080	-- <sup>c</sup>	8.40E+00	-- <sup>c</sup>	--
116-B-10_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.053	-- <sup>c</sup>	8.40E+00	-- <sup>c</sup>	--
116-B-10_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.56	-- <sup>c</sup>	8.40E+00	-- <sup>c</sup>	--
116-B-10_Shallow	Rad	Uranium-238	U-238	pCi/g	0.71	-- <sup>c</sup>	8.40E+00	-- <sup>c</sup>	--
116-B-11_Deep	non-Rad	Chromium	7440-47-3	µg/kg	231,428	-- <sup>d</sup>	8.57E+01	-- <sup>d</sup>	--
116-B-11_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,226	6,000 <sup>e</sup>	8.57E+01	6,000 <sup>e</sup>	No
116-B-11_Deep	non-Rad	Lead	7439-92-1	µg/kg	11,745	-- <sup>d</sup>	8.57E+01	-- <sup>d</sup>	--
116-B-11_Deep	non-Rad	Mercury	7439-97-6	µg/kg	5,251	80,585	8.57E+01	940	Yes
116-B-11_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,297	-- <sup>f</sup>	8.57E+01	-- <sup>f</sup>	--
116-B-11_Deep	Rad	Americium-241	14596-10-2	pCi/g	5.1	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-11_Deep	Rad	Cesium-137	10045-97-3	pCi/g	122	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	40	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Europium-152	14683-23-9	pCi/g	325	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Europium-154	15585-10-1	pCi/g	42	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Europium-155	14391-16-3	pCi/g	2.2	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Nickel-63	13981-37-8	pCi/g	2,702	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.76	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	19	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	4.8	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.6	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.069	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Deep	Rad	Uranium-238	U-238	pCi/g	1.4	-- <sup>c</sup>	8.57E+01	-- <sup>c</sup>	--
116-B-11_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	13,637	-- <sup>d</sup>	6.80E+00	-- <sup>d</sup>	--
116-B-11_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	1,670	6,000 <sup>e</sup>	6.80E+00	6,000 <sup>e</sup>	No
116-B-11_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,063	-- <sup>d</sup>	6.80E+00	-- <sup>d</sup>	--
116-B-11_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	121	80,585	6.80E+00	11,851	No
116-B-11_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	3,928	-- <sup>f</sup>	6.80E+00	-- <sup>f</sup>	--
116-B-11_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.094	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.92	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.28	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.9	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	22	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.069	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.34	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.3	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.057	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-11_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	-- <sup>c</sup>	6.80E+00	-- <sup>c</sup>	--
116-B-12_Deep	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,800	-- <sup>d</sup>	1.52E+01	-- <sup>d</sup>	--
116-B-12_Deep	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	860	6,000 <sup>e</sup>	1.52E+01	6,000 <sup>e</sup>	No
116-B-12_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,700	-- <sup>d</sup>	1.52E+01	-- <sup>d</sup>	--
116-B-12_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,048	-- <sup>f</sup>	1.52E+01	-- <sup>f</sup>	--
116-B-12_Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.019	-- <sup>c</sup>	1.52E+01	-- <sup>c</sup>	--
116-B-12_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	-- <sup>c</sup>	1.52E+01	-- <sup>c</sup>	--
116-B-12_Deep	Rad	Uranium-238	U-238	pCi/g	0.69	-- <sup>c</sup>	1.52E+01	-- <sup>c</sup>	--
116-B-12_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,900	-- <sup>d</sup>	1.59E+01	-- <sup>d</sup>	--
116-B-12_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,600	-- <sup>d</sup>	1.59E+01	-- <sup>d</sup>	--
116-B-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,884	-- <sup>f</sup>	1.59E+01	-- <sup>f</sup>	--
116-B-12_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.034	-- <sup>c</sup>	1.59E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-12_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	-- <sup>c</sup>	1.59E+01	-- <sup>c</sup>	--
116-B-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.024	-- <sup>c</sup>	1.59E+01	-- <sup>c</sup>	--
116-B-12_Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	-- <sup>c</sup>	1.59E+01	-- <sup>c</sup>	--
116-B-13_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	5,700	-- <sup>d</sup>	2.46E+01	-- <sup>d</sup>	--
116-B-13_Shallow	non-Rad	Lead	7439-92-1	µg/kg	2,300	-- <sup>d</sup>	2.46E+01	-- <sup>d</sup>	--
116-B-13_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	20	80,585	2.46E+01	3,276	No
116-B-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,975	-- <sup>f</sup>	2.46E+01	-- <sup>f</sup>	--
116-B-13_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.49	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.049	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-13_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.043	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-13_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.41	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-13_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.1	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-13_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.055	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-13_Shallow	Rad	Uranium-238	U-238	pCi/g	0.99	-- <sup>c</sup>	2.46E+01	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Aluminum	7429-90-5	µg/kg	7.92E+06	-- <sup>d</sup>	3.60E+00	-- <sup>d</sup>	--
116-B-14_Deep	non-Rad	Antimony	7440-36-0	µg/kg	6,600	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Barium	7440-39-3	µg/kg	93,800	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Beryllium	7440-41-7	µg/kg	520	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Chromium	7440-47-3	µg/kg	18,600	-- <sup>d</sup>	3.60E+00	-- <sup>d</sup>	--
116-B-14_Deep	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Copper	7440-50-8	µg/kg	17,400	93,717	3.60E+00	26,033	No
116-B-14_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	252	6,000 <sup>e</sup>	3.60E+00	6,000 <sup>e</sup>	No
116-B-14_Deep	non-Rad	Iron	7439-89-6	µg/kg	1.93E+07	2.61E+07	3.60E+00	7.25E+06	Yes
116-B-14_Deep	non-Rad	Lead	7439-92-1	µg/kg	5,300	-- <sup>d</sup>	3.60E+00	-- <sup>d</sup>	--
116-B-14_Deep	non-Rad	Manganese	7439-96-5	µg/kg	307,000	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Mercury	7439-97-6	µg/kg	18	80,585	3.60E+00	22,385	No
116-B-14_Deep	non-Rad	Nickel	7440-02-0	µg/kg	17,900	3.89E+08	3.60E+00	1.08E+08	No
116-B-14_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,095	-- <sup>f</sup>	3.60E+00	-- <sup>f</sup>	--
116-B-14_Deep	non-Rad	Vanadium	7440-62-2	µg/kg	39,600	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	non-Rad	Zinc	7440-66-6	µg/kg	42,300	3.89E+08	3.60E+00	1.08E+08	No
116-B-14_Deep	Rad	Cesium-137	10045-97-3	pCi/g	5.9	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	Rad	Europium-152	14683-23-9	pCi/g	1.3	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.10	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.5	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	Rad	Uranium-234	13966-29-5	pCi/g	0.99	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.063	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Deep	Rad	Uranium-238	U-238	pCi/g	1.0	-- <sup>c</sup>	3.60E+00	-- <sup>c</sup>	--
116-B-14_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	33,600	-- <sup>d</sup>	3.40E+00	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-14_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	297	6,000 <sup>e</sup>	3.40E+00	6,000 <sup>e</sup>	No
116-B-14_Shallow	non-Rad	Lead	7439-92-1	µg/kg	20,000	-- <sup>d</sup>	3.40E+00	-- <sup>d</sup>	--
116-B-14_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	30	80,585	3.40E+00	23,702	No
116-B-14_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,346	-- <sup>f</sup>	3.40E+00	-- <sup>f</sup>	--
116-B-14_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.26	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.96	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Europium-152	14683-23-9	pCi/g	4.4	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.37	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.6	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.5	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.061	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-14_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	-- <sup>c</sup>	3.40E+00	-- <sup>c</sup>	--
116-B-15_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,800	1.05E+07	1.79E+01	584,603	No
116-B-15_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	89,000	-- <sup>c</sup>	1.79E+01	-- <sup>c</sup>	--
116-B-15_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	14,400	-- <sup>d</sup>	1.79E+01	-- <sup>d</sup>	--
116-B-15_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	9,300	-- <sup>d</sup>	1.79E+01	-- <sup>d</sup>	--
116-B-15_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	500	1,000	1.79E+01	56	Yes
116-B-15_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,983	-- <sup>f</sup>	1.79E+01	-- <sup>f</sup>	--
116-B-15_Shallow_Focused	Rad	Nickel-63	13981-37-8	pCi/g	21	-- <sup>c</sup>	1.79E+01	-- <sup>c</sup>	--
116-B-15_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.67	-- <sup>c</sup>	1.79E+01	-- <sup>c</sup>	--
116-B-15_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.67	-- <sup>c</sup>	1.79E+01	-- <sup>c</sup>	--
116-B-2_Deep	non-Rad	Chromium	7440-47-3	µg/kg	12,000	-- <sup>d</sup>	1.49E+01	-- <sup>d</sup>	--
116-B-2_Deep	non-Rad	Lead	7439-92-1	µg/kg	6,600	-- <sup>d</sup>	1.49E+01	-- <sup>d</sup>	--
116-B-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,658	-- <sup>f</sup>	1.49E+01	-- <sup>f</sup>	--
116-B-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.11	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	47	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.023	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Europium-152	14683-23-9	pCi/g	0.60	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.59	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Deep	Rad	Uranium-238	U-238	pCi/g	0.56	-- <sup>c</sup>	1.49E+01	-- <sup>c</sup>	--
116-B-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,300	-- <sup>d</sup>	7.70E+00	-- <sup>d</sup>	--
116-B-2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,100	-- <sup>d</sup>	7.70E+00	-- <sup>d</sup>	--
116-B-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,482	-- <sup>f</sup>	7.70E+00	-- <sup>f</sup>	--
116-B-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.2	-- <sup>c</sup>	7.70E+00	-- <sup>c</sup>	--
116-B-2_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.32	-- <sup>c</sup>	7.70E+00	-- <sup>c</sup>	--
116-B-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	-- <sup>c</sup>	7.70E+00	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.50	-- <sup>c</sup>	7.70E+00	-- <sup>c</sup>	--
116-B-3_Deep	non-Rad	Chromium	7440-47-3	µg/kg	10,400	-- <sup>d</sup>	2.20E+00	-- <sup>d</sup>	--
116-B-3_Deep	non-Rad	Lead	7439-92-1	µg/kg	5,900	-- <sup>d</sup>	2.20E+00	-- <sup>d</sup>	--
116-B-3_Deep	non-Rad	Mercury	7439-97-6	µg/kg	20	80,585	2.20E+00	36,630	No
116-B-3_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,727	-- <sup>f</sup>	2.20E+00	-- <sup>f</sup>	--
116-B-3_Deep	Rad	Cesium-137	10045-97-3	pCi/g	20	-- <sup>c</sup>	2.20E+00	-- <sup>c</sup>	--
116-B-3_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.26	-- <sup>c</sup>	2.20E+00	-- <sup>c</sup>	--
116-B-3_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	3.2	-- <sup>c</sup>	2.20E+00	-- <sup>c</sup>	--
116-B-3_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.56	-- <sup>c</sup>	2.20E+00	-- <sup>c</sup>	--
116-B-3_Deep	Rad	Uranium-238	U-238	pCi/g	0.58	-- <sup>c</sup>	2.20E+00	-- <sup>c</sup>	--
116-B-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,800	-- <sup>d</sup>	6.50E+00	-- <sup>d</sup>	--
116-B-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	8,400	-- <sup>d</sup>	6.50E+00	-- <sup>d</sup>	--
116-B-3_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	50	80,585	6.50E+00	12,398	No
116-B-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,697	-- <sup>f</sup>	6.50E+00	-- <sup>f</sup>	--
116-B-3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.061	-- <sup>c</sup>	6.50E+00	-- <sup>c</sup>	--
116-B-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.70	-- <sup>c</sup>	6.50E+00	-- <sup>c</sup>	--
116-B-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.57	-- <sup>c</sup>	6.50E+00	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Acetone	67-64-1	µg/kg	12	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Aluminum	7429-90-5	µg/kg	7.62E+06	-- <sup>d</sup>	3.89E+01	-- <sup>d</sup>	--
116-B-4_Deep	non-Rad	Antimony	7440-36-0	µg/kg	6,701	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Aroclor-1254	11097-69-1	µg/kg	130	-- <sup>d</sup>	3.89E+01	-- <sup>d</sup>	--
116-B-4_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	3,600	1.05E+07	3.89E+01	269,008	No
116-B-4_Deep	non-Rad	Barium	7440-39-3	µg/kg	50,733	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Beryllium	7440-41-7	µg/kg	459	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	290	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	394	500	3.89E+01	13	Yes
116-B-4_Deep	non-Rad	Chromium	7440-47-3	µg/kg	92,716	-- <sup>d</sup>	3.89E+01	-- <sup>d</sup>	--
116-B-4_Deep	non-Rad	Cobalt	7440-48-4	µg/kg	8,845	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Copper	7440-50-8	µg/kg	21,616	93,717	3.89E+01	2,409	Yes
116-B-4_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	423	6,000 <sup>e</sup>	3.89E+01	6,000 <sup>e</sup>	No
116-B-4_Deep	non-Rad	Iron	7439-89-6	µg/kg	2.30E+07	2.61E+07	3.89E+01	671,204	Yes
116-B-4_Deep	non-Rad	Lead	7439-92-1	µg/kg	94,296	-- <sup>d</sup>	3.89E+01	-- <sup>d</sup>	--
116-B-4_Deep	non-Rad	Manganese	7439-96-5	µg/kg	206,278	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Mercury	7439-97-6	µg/kg	440	80,585	3.89E+01	2,072	No
116-B-4_Deep	non-Rad	Methylene chloride	75-09-2	µg/kg	8.0	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--
116-B-4_Deep	non-Rad	Nickel	7440-02-0	µg/kg	6,185	3.89E+08	3.89E+01	1.00E+07	No
116-B-4_Deep	non-Rad	Silver	7440-22-4	µg/kg	720	826	3.89E+01	21	Yes
116-B-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,643	-- <sup>f</sup>	3.89E+01	-- <sup>f</sup>	--
116-B-4_Deep	non-Rad	Vanadium	7440-62-2	µg/kg	53,083	-- <sup>c</sup>	3.89E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-4_Deep	non-Rad	Zinc	7440-66-6	µg/kg	43,911	3.89E+08	3.89E+01	1.00E+07	No
116-B-4_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.070	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Cesium-137	10045-97-3	pCi/g	112	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	18	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Europium-152	14683-23-9	pCi/g	195	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Europium-154	15585-10-1	pCi/g	45	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Europium-155	14391-16-3	pCi/g	1.3	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Niobium-94	14681-63-1	pCi/g	0.34	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.51	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Deep	Rad	Uranium-238	U-238	pCi/g	0.55	— <sup>c</sup>	3.89E+01	— <sup>c</sup>	--
116-B-4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,900	— <sup>d</sup>	1.00E+01	— <sup>d</sup>	--
116-B-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,800	— <sup>d</sup>	1.00E+01	— <sup>d</sup>	--
116-B-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,881	— <sup>f</sup>	1.00E+01	— <sup>f</sup>	--
116-B-4_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.049	— <sup>c</sup>	1.00E+01	— <sup>c</sup>	--
116-B-4_Shallow	Rad	Plutonium-238	13981-16-3	pCi/g	0.37	— <sup>c</sup>	1.00E+01	— <sup>c</sup>	--
116-B-4_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.35	— <sup>c</sup>	1.00E+01	— <sup>c</sup>	--
116-B-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	— <sup>c</sup>	1.00E+01	— <sup>c</sup>	--
116-B-4_Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	— <sup>c</sup>	1.00E+01	— <sup>c</sup>	--
116-B-5_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	2,800	80,585	1.85E+01	4,356	No
116-B-5_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.29	— <sup>c</sup>	1.85E+01	— <sup>c</sup>	--
116-B-5_Deep_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	0.94	— <sup>c</sup>	1.85E+01	— <sup>c</sup>	--
116-B-5_Deep_Focused	Rad	Europium-152	14683-23-9	pCi/g	10.0	— <sup>c</sup>	1.85E+01	— <sup>c</sup>	--
116-B-5_Deep_Focused	Rad	Europium-154	15585-10-1	pCi/g	0.88	— <sup>c</sup>	1.85E+01	— <sup>c</sup>	--
116-B-5_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	300,000	— <sup>c</sup>	3.76E+01	— <sup>c</sup>	--
116-B-5_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	16,000	80,585	3.76E+01	2,143	Yes
116-B-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	— <sup>c</sup>	3.76E+01	— <sup>c</sup>	--
116-B-5_Shallow_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	1.0	— <sup>c</sup>	3.76E+01	— <sup>c</sup>	--
116-B-5_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	7.3	— <sup>c</sup>	3.76E+01	— <sup>c</sup>	--
116-B-5_Shallow_Focused	Rad	Europium-154	15585-10-1	pCi/g	0.67	— <sup>c</sup>	3.76E+01	— <sup>c</sup>	--
116-B-5_Shallow_Focused	Rad	Tritium	10028-17-8	pCi/g	680	— <sup>c</sup>	3.76E+01	— <sup>c</sup>	--
116-B-6A_Deep	non-Rad	Chromium	7440-47-3	µg/kg	7,100	— <sup>d</sup>	1.10E+01	— <sup>d</sup>	--
116-B-6A_Deep	non-Rad	Lead	7439-92-1	µg/kg	5,900	— <sup>d</sup>	1.10E+01	— <sup>d</sup>	--
116-B-6A_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,735	— <sup>f</sup>	1.10E+01	— <sup>f</sup>	--
116-B-6A_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.16	— <sup>c</sup>	1.10E+01	— <sup>c</sup>	--
116-B-6A_Deep	Rad	Cesium-137	10045-97-3	pCi/g	2.0	— <sup>c</sup>	1.10E+01	— <sup>c</sup>	--
116-B-6A_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	2.8	— <sup>c</sup>	1.10E+01	— <sup>c</sup>	--
116-B-6A_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	21	— <sup>c</sup>	1.10E+01	— <sup>c</sup>	--
116-B-6A_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.55	— <sup>c</sup>	1.10E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (μg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (μg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-6A_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.042	-- <sup>c</sup>	1.10E+01	-- <sup>c</sup>	--
116-B-6A_Deep	Rad	Uranium-238	U-238	pCi/g	0.58	-- <sup>c</sup>	1.10E+01	-- <sup>c</sup>	--
116-B-6A_Shallow	non-Rad	Chromium	7440-47-3	μg/kg	10,700	-- <sup>d</sup>	7.90E+00	-- <sup>d</sup>	--
116-B-6A_Shallow	non-Rad	Lead	7439-92-1	μg/kg	11,100	-- <sup>d</sup>	7.90E+00	-- <sup>d</sup>	--
116-B-6A_Shallow	non-Rad	Mercury	7439-97-6	μg/kg	20	80,585	7.90E+00	10,201	No
116-B-6A_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	1,779	-- <sup>f</sup>	7.90E+00	-- <sup>f</sup>	--
116-B-6A_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	37	-- <sup>c</sup>	7.90E+00	-- <sup>c</sup>	--
116-B-6A_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.23	-- <sup>c</sup>	7.90E+00	-- <sup>c</sup>	--
116-B-6A_Shallow	Rad	Total beta radiostromtium	SR-RAD	pCi/g	3.3	-- <sup>c</sup>	7.90E+00	-- <sup>c</sup>	--
116-B-6A_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	-- <sup>c</sup>	7.90E+00	-- <sup>c</sup>	--
116-B-6A_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.28	-- <sup>c</sup>	7.90E+00	-- <sup>c</sup>	--
116-B-6A_Shallow	Rad	Uranium-238	U-238	pCi/g	0.55	-- <sup>c</sup>	7.90E+00	-- <sup>c</sup>	--
116-B-6B_Shallow	non-Rad	Chromium	7440-47-3	μg/kg	9,500	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
116-B-6B_Shallow	non-Rad	Lead	7439-92-1	μg/kg	7,900	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
116-B-6B_Shallow	non-Rad	Mercury	7439-97-6	μg/kg	40	80,585	8.60E+00	9,370	No
116-B-6B_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	1,917	-- <sup>f</sup>	8.60E+00	-- <sup>f</sup>	--
116-B-6B_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.030	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
116-B-6B_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
116-B-6B_Shallow	Rad	Uranium-238	U-238	pCi/g	0.64	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Chromium	7440-47-3	μg/kg	25,200	-- <sup>d</sup>	1.27E+01	-- <sup>d</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Hexavalent Chromium	18540-29-9	μg/kg	2,100	6,000 <sup>e</sup>	1.27E+01	6,000 <sup>e</sup>	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Lead	7439-92-1	μg/kg	8,800	-- <sup>d</sup>	1.27E+01	-- <sup>d</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Mercury	7439-97-6	μg/kg	750	80,585	1.27E+01	6,345	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	2,525	-- <sup>f</sup>	1.27E+01	-- <sup>f</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	3.5	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.18	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Europium-152	14683-23-9	pCi/g	1.4	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Nickel-63	13981-37-8	pCi/g	3.3	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.40	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.93	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.053	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-238	U-238	pCi/g	0.84	-- <sup>c</sup>	1.27E+01	-- <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Chromium	7440-47-3	μg/kg	19,087	-- <sup>d</sup>	2.09E+01	-- <sup>d</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	μg/kg	688	6,000 <sup>e</sup>	2.09E+01	6,000 <sup>e</sup>	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Lead	7439-92-1	μg/kg	7,194	-- <sup>d</sup>	2.09E+01	-- <sup>d</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Mercury	7439-97-6	μg/kg	63	80,585	2.09E+01	3,856	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	2,072	-- <sup>f</sup>	2.09E+01	-- <sup>f</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.34	-- <sup>c</sup>	2.09E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.25	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.9	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.22	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	3.6	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.75	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.050	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.69	— <sup>c</sup>	2.09E+01	— <sup>c</sup>	--
116-B-9_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,200	— <sup>d</sup>	7.10E+00	— <sup>d</sup>	--
116-B-9_Shallow	non-Rad	Lead	7439-92-1	µg/kg	12,000	— <sup>d</sup>	7.10E+00	— <sup>d</sup>	--
116-B-9_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	390	80,585	7.10E+00	11,350	No
116-B-9_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,372	— <sup>f</sup>	7.10E+00	— <sup>f</sup>	--
116-B-9_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.44	— <sup>c</sup>	7.10E+00	— <sup>c</sup>	--
116-B-9_Shallow	Rad	Uranium-238	U-238	pCi/g	0.46	— <sup>c</sup>	7.10E+00	— <sup>c</sup>	--
116-C-1_Deep	non-Rad	Chromium	7440-47-3	µg/kg	66,667	— <sup>d</sup>	5.75E+01	— <sup>d</sup>	--
116-C-1_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	497	6,000 <sup>e</sup>	5.75E+01	6,000 <sup>e</sup>	No
116-C-1_Deep	non-Rad	Lead	7439-92-1	µg/kg	21,737	— <sup>d</sup>	5.75E+01	— <sup>d</sup>	--
116-C-1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	2,275	80,585	5.75E+01	1,401	Yes
116-C-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	34,266	— <sup>f</sup>	5.75E+01	— <sup>f</sup>	--
116-C-1_Deep	Rad	Americium-241	14596-10-2	pCi/g	25	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1,484	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	62	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Europium-152	14683-23-9	pCi/g	412	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Europium-154	15585-10-1	pCi/g	28	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Europium-155	14391-16-3	pCi/g	1.6	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Nickel-63	13981-37-8	pCi/g	634	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.94	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	46	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	64	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.55	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Uranium-234	13966-29-5	pCi/g	5.1	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.063	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep	Rad	Uranium-238	U-238	pCi/g	6.1	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	9.69E+06	— <sup>d</sup>	5.75E+01	— <sup>d</sup>	--
116-C-1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	2,600	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	77,800	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	530	— <sup>c</sup>	5.75E+01	— <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	2,900	500	5.75E+01	8.7	Yes
116-C-1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	148,000	— <sup>d</sup>	5.75E+01	— <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-C-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,000	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	30,400	93,717	5.75E+01	1,630	Yes
116-C-1_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,800	6,000 <sup>e</sup>	5.75E+01	6,000 <sup>e</sup>	No
116-C-1_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.31E+07	2.61E+07	5.75E+01	454,084	Yes
116-C-1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	48,500	-- <sup>d</sup>	5.75E+01	-- <sup>d</sup>	--
116-C-1_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	296,000	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	11,800	80,585	5.75E+01	1,401	Yes
116-C-1_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	18,600	3.89E+08	5.75E+01	6.77E+06	No
116-C-1_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	890	826	5.75E+01	14	Yes
116-C-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,977	-- <sup>f</sup>	5.75E+01	-- <sup>f</sup>	--
116-C-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	38,600	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	464,000	3.89E+08	5.75E+01	6.77E+06	No
116-C-1_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	83	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	5,690	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	115	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Europium-152	14683-23-9	pCi/g	1,120	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Europium-154	15585-10-1	pCi/g	144	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Nickel-63	13981-37-8	pCi/g	1,590	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	4.0	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	136	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	88	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Uranium-234	13966-29-5	pCi/g	0.19	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	1.0	-- <sup>c</sup>	5.75E+01	-- <sup>c</sup>	--
116-C-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,664	-- <sup>d</sup>	1.23E+01	-- <sup>d</sup>	--
116-C-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,420	-- <sup>d</sup>	1.23E+01	-- <sup>d</sup>	--
116-C-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	30	80,585	1.23E+01	6,552	No
116-C-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,357	-- <sup>f</sup>	1.23E+01	-- <sup>f</sup>	--
116-C-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.83	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.074	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.6	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.22	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.20	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	0.82	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.045	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.79	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
116-C-2A_Deep	non-Rad	Chromium	7440-47-3	µg/kg	29,500	-- <sup>d</sup>	1.42E+01	-- <sup>d</sup>	--
116-C-2A_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	848	6,000 <sup>e</sup>	1.42E+01	6,000 <sup>e</sup>	No
116-C-2A_Deep	non-Rad	Lead	7439-92-1	µg/kg	14,000	-- <sup>d</sup>	1.42E+01	-- <sup>d</sup>	--
116-C-2A_Deep	non-Rad	Mercury	7439-97-6	µg/kg	150	80,585	1.42E+01	5,675	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-C-2A_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,428	— <sup>f</sup>	1.42E+01	— <sup>f</sup>	—
116-C-2A_Deep	Rad	Americium-241	14596-10-2	pCi/g	0.71	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Cesium-137	10045-97-3	pCi/g	23	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	12	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Europium-152	14683-23-9	pCi/g	30	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Europium-154	15585-10-1	pCi/g	3.3	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Nickel-63	13981-37-8	pCi/g	540	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.15	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	1.5	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	6.2	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.45	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.036	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Deep	Rad	Uranium-238	U-238	pCi/g	0.48	— <sup>c</sup>	1.42E+01	— <sup>c</sup>	—
116-C-2A_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,262	— <sup>d</sup>	9.80E+00	— <sup>d</sup>	—
116-C-2A_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,600	— <sup>d</sup>	9.80E+00	— <sup>d</sup>	—
116-C-2A_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	120	80,585	9.80E+00	8,223	No
116-C-2A_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,378	— <sup>f</sup>	9.80E+00	— <sup>f</sup>	—
116-C-2A_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.43	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.23	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.26	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	4.7	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.10	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.9	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.50	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-2A_Shallow	Rad	Uranium-238	U-238	pCi/g	0.46	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	9.19E+06	— <sup>d</sup>	5.00E+00	— <sup>d</sup>	—
116-C-3_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,080	— <sup>c</sup>	5.00E+00	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	5,112	1.05E+07	5.00E+00	2.09E+06	No
116-C-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	106,052	— <sup>c</sup>	5.00E+00	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	725	— <sup>c</sup>	5.00E+00	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	7,239	— <sup>c</sup>	5.00E+00	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	204	500	5.00E+00	100	Yes
116-C-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	15,457	— <sup>d</sup>	5.00E+00	— <sup>d</sup>	—
116-C-3_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	7,387	— <sup>c</sup>	5.00E+00	— <sup>c</sup>	—
116-C-3_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,592	93,717	5.00E+00	18,743	No
116-C-3_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,430	6,000 <sup>e</sup>	5.00E+00	6,000 <sup>e</sup>	No
116-C-3_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.92E+07	2.61E+07	5.00E+00	5.22E+06	Yes
116-C-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,129	— <sup>d</sup>	5.00E+00	— <sup>d</sup>	—



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-C-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	321,076	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	15,662	3.89E+08	5.00E+00	7.78E+07	No
116-C-3_Shallow	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	1,430	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,278	-- <sup>f</sup>	5.00E+00	-- <sup>f</sup>	--
116-C-3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	38,808	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	48,655	3.89E+08	5.00E+00	7.78E+07	No
116-C-3_Shallow	Rad	Carbon-14	14762-75-5	pCi/g	42	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.86	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.15	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.64	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	Rad	Tritium	10028-17-8	pCi/g	7.2	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.80	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.77	-- <sup>c</sup>	5.00E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.15E+07	-- <sup>d</sup>	4.60E+00	-- <sup>d</sup>	--
116-C-3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,400	1.05E+07	4.60E+00	2.27E+06	No
116-C-3_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	196,000	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	710	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	24,300	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	360	500	4.60E+00	109	Yes
116-C-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	26,400	-- <sup>d</sup>	4.60E+00	-- <sup>d</sup>	--
116-C-3_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,700	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	20,400	93,717	4.60E+00	20,373	Yes
116-C-3_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,500	6,000 <sup>e</sup>	4.60E+00	6,000 <sup>e</sup>	No
116-C-3_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.99E+07	2.61E+07	4.60E+00	5.68E+06	Yes
116-C-3_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	9,100	-- <sup>d</sup>	4.60E+00	-- <sup>d</sup>	--
116-C-3_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	346,000	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	1,100	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	18,200	3.89E+08	4.60E+00	8.46E+07	No
116-C-3_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	12,400	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	480	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	270	826	4.60E+00	180	Yes
116-C-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,560	-- <sup>f</sup>	4.60E+00	-- <sup>f</sup>	--
116-C-3_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	42,400	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	51,400	3.89E+08	4.60E+00	8.46E+07	No
116-C-3_Shallow_Focused	Rad	Americium-241	14596-10-2	pCi/g	0.27	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	14	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.91	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	18	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--
116-C-3_Shallow_Focused	Rad	Tritium	10028-17-8	pCi/g	4.0	-- <sup>c</sup>	4.60E+00	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-C-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.90	— <sup>c</sup>	4.60E+00	— <sup>c</sup>	--
116-C-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.042	— <sup>c</sup>	4.60E+00	— <sup>c</sup>	--
116-C-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.86	— <sup>c</sup>	4.60E+00	— <sup>c</sup>	--
116-C-5_Deep	non-Rad	Chromium	7440-47-3	µg/kg	41,332	— <sup>d</sup>	9.31E+01	— <sup>d</sup>	--
116-C-5_Deep	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	1,290	6,000 <sup>e</sup>	9.31E+01	6,000 <sup>e</sup>	No
116-C-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	20,715	— <sup>d</sup>	9.31E+01	— <sup>d</sup>	--
116-C-5_Deep	non-Rad	Mercury	7439-97-6	µg/kg	2,436	80,585	9.31E+01	866	Yes
116-C-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,838	— <sup>f</sup>	9.31E+01	— <sup>f</sup>	--
116-C-5_Deep	Rad	Americium-241	14596-10-2	pCi/g	2.2	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Cesium-137	10045-97-3	pCi/g	52	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	18	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Europium-152	14683-23-9	pCi/g	73	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Europium-154	15585-10-1	pCi/g	16	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Europium-155	14391-16-3	pCi/g	0.48	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Nickel-63	13981-37-8	pCi/g	644	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.14	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	4.6	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Total beta radiostromium	SR-RAD	pCi/g	4.4	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.0	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.048	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Deep	Rad	Uranium-238	U-238	pCi/g	0.95	— <sup>c</sup>	9.31E+01	— <sup>c</sup>	--
116-C-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,609	— <sup>d</sup>	1.04E+01	— <sup>d</sup>	--
116-C-5_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	239	6,000 <sup>e</sup>	1.04E+01	6,000 <sup>e</sup>	No
116-C-5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,017	— <sup>d</sup>	1.04E+01	— <sup>d</sup>	--
116-C-5_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	32	80,585	1.04E+01	7,749	No
116-C-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,773	— <sup>f</sup>	1.04E+01	— <sup>f</sup>	--
116-C-5_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.39	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.2	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.15	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Europium-152	14683-23-9	pCi/g	1.5	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.32	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	7.8	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.20	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Total beta radiostromium	SR-RAD	pCi/g	0.39	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	0.84	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.039	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-5_Shallow	Rad	Uranium-238	U-238	pCi/g	0.93	— <sup>c</sup>	1.04E+01	— <sup>c</sup>	--
116-C-6_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,400	1.05E+07	2.40E+00	4.36E+06	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
116-C-6_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	44,700	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,700	-- <sup>d</sup>	2.40E+00	-- <sup>d</sup>	--
116-C-6_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,300	-- <sup>d</sup>	2.40E+00	-- <sup>d</sup>	--
116-C-6_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,557	-- <sup>f</sup>	2.40E+00	-- <sup>f</sup>	--
116-C-6_Shallow_Focused	Rad	Americium-241	14596-10-2	pCi/g	0.64	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.9	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	0.25	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Nickel-63	13981-37-8	pCi/g	5.4	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.53	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.46	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.041	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
116-C-6_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.52	-- <sup>c</sup>	2.40E+00	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	4-Methyl-2-pentanone	108-10-1	µg/kg	8.0	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Acetone	67-64-1	µg/kg	23	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	6.60E+06	-- <sup>d</sup>	3.74E+01	-- <sup>d</sup>	--
118-B-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,100	1.05E+07	3.74E+01	279,797	No
118-B-1_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	63,100	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	660	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	240	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,900	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,200	-- <sup>d</sup>	3.74E+01	-- <sup>d</sup>	--
118-B-1_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	10,700	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	17,900	93,717	3.74E+01	2,506	Yes
118-B-1_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	19	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.41E+07	2.61E+07	3.74E+01	698,124	Yes
118-B-1_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	4,900	-- <sup>d</sup>	3.74E+01	-- <sup>d</sup>	--
118-B-1_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	411,000	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	20	80,585	3.74E+01	2,155	No
118-B-1_Shallow_1	non-Rad	Methylene chloride	75-09-2	µg/kg	15	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	12,900	3.89E+08	3.74E+01	1.04E+07	No
118-B-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,703	-- <sup>f</sup>	3.74E+01	-- <sup>f</sup>	--
118-B-1_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	51,900	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	49,100	3.89E+08	3.74E+01	1.04E+07	No
118-B-1_Shallow_1	Rad	Carbon-14	14762-75-5	pCi/g	3.4	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.31	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	Rad	Europium-152	14683-23-9	pCi/g	1.2	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.28	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-1_Shallow_1	Rad	Tritium	10028-17-8	pCi/g	239	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.57	-- <sup>c</sup>	3.74E+01	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.17E+06	-- <sup>d</sup>	6.10E+00	-- <sup>d</sup>	--
118-B-1_Shallow_2	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,200	1.05E+07	6.10E+00	1.72E+06	No
118-B-1_Shallow_2	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	61,000	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	650	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	5,500	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	6,900	-- <sup>d</sup>	6.10E+00	-- <sup>d</sup>	--
118-B-1_Shallow_2	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,400	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,800	93,717	6.10E+00	15,363	Yes
118-B-1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	330	6,000 <sup>e</sup>	6.10E+00	6,000 <sup>e</sup>	No
118-B-1_Shallow_2	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.18E+07	2.61E+07	6.10E+00	4.28E+06	Yes
118-B-1_Shallow_2	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,000	-- <sup>d</sup>	6.10E+00	-- <sup>d</sup>	--
118-B-1_Shallow_2	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	329,000	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,000	3.89E+08	6.10E+00	6.38E+07	No
118-B-1_Shallow_2	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	54,700	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	43,300	3.89E+08	6.10E+00	6.38E+07	No
118-B-1_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.22	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	Rad	Total beta radiostromium	SR-RAD	pCi/g	0.25	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_2	Rad	Tritium	10028-17-8	pCi/g	60	-- <sup>c</sup>	6.10E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	4-Methyl-2-pentanone	108-10-1	$\mu\text{g}/\text{kg}$	6.0	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	16	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.12E+06	-- <sup>d</sup>	9.80E+00	-- <sup>d</sup>	--
118-B-1_Shallow_3	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,500	1.05E+07	9.80E+00	1.07E+06	No
118-B-1_Shallow_3	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	65,900	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	650	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	39	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	8,900	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	11	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,200	-- <sup>d</sup>	9.80E+00	-- <sup>d</sup>	--
118-B-1_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,100	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	18,000	93,717	9.80E+00	9,563	Yes
118-B-1_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	54	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	210	6,000 <sup>e</sup>	9.80E+00	6,000 <sup>e</sup>	No
118-B-1_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.21E+07	2.61E+07	9.80E+00	2.66E+06	Yes
118-B-1_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	6,600	-- <sup>d</sup>	9.80E+00	-- <sup>d</sup>	--
118-B-1_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	390,000	-- <sup>c</sup>	9.80E+00	-- <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	300	80,585	9.80E+00	8,223	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-1_Shallow_3	non-Rad	Methylene chloride	75-09-2	µg/kg	26	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	19,000	3.89E+08	9.80E+00	3.97E+07	No
118-B-1_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	49,200	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-B-1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	44,300	3.89E+08	9.80E+00	3.97E+07	No
118-B-1_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	1.5	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-B-1_Shallow_3	Rad	Total beta radiostrontium	SR-RAD	pCi/g	4.4	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-B-1_Shallow_3	Rad	Tritium	10028-17-8	pCi/g	19	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	µg/kg	13	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	µg/kg	19	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	16	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Acetone	67-64-1	µg/kg	19	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Aluminum	7429-90-5	µg/kg	5.27E+06	— <sup>d</sup>	1.72E+01	— <sup>d</sup>	--
118-B-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	µg/kg	80	— <sup>d</sup>	1.72E+01	— <sup>d</sup>	--
118-B-1_Shallow_4	non-Rad	Arsenic	7440-38-2	µg/kg	3,900	1.05E+07	1.72E+01	608,395	No
118-B-1_Shallow_4	non-Rad	Barium	7440-39-3	µg/kg	51,400	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Beryllium	7440-41-7	µg/kg	420	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	7.8	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	600	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Boron	7440-42-8	µg/kg	3,900	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Carbon tetrachloride	56-23-5	µg/kg	17	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Chlordane	57-74-9	µg/kg	2.5	24,442	1.72E+01	1,421	No
118-B-1_Shallow_4	non-Rad	Chromium	7440-47-3	µg/kg	6,700	— <sup>d</sup>	1.72E+01	— <sup>d</sup>	--
118-B-1_Shallow_4	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Copper	7440-50-8	µg/kg	16,500	93,717	1.72E+01	5,449	Yes
118-B-1_Shallow_4	non-Rad	Dalapon	75-99-0	µg/kg	48	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Dieldrin	60-57-1	µg/kg	3.8	58	1.72E+01	3.4	Yes
118-B-1_Shallow_4	non-Rad	Diethylphthalate	84-66-2	µg/kg	17	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	63	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Endrin	72-20-8	µg/kg	1.5	3.0	1.72E+01	0.17	Yes
118-B-1_Shallow_4	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	300	6,000 <sup>e</sup>	1.72E+01	6,000 <sup>e</sup>	No
118-B-1_Shallow_4	non-Rad	Iron	7439-89-6	µg/kg	2.23E+07	2.61E+07	1.72E+01	1.52E+06	Yes
118-B-1_Shallow_4	non-Rad	Lead	7439-92-1	µg/kg	5,500	— <sup>d</sup>	1.72E+01	— <sup>d</sup>	--
118-B-1_Shallow_4	non-Rad	Manganese	7439-96-5	µg/kg	336,000	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Methylene chloride	75-09-2	µg/kg	12	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Nickel	7440-02-0	µg/kg	11,300	3.89E+08	1.72E+01	2.26E+07	No
118-B-1_Shallow_4	non-Rad	Phenol	108-95-2	µg/kg	26	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Vanadium	7440-62-2	µg/kg	53,400	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--
118-B-1_Shallow_4	non-Rad	Zinc	7440-66-6	µg/kg	42,400	3.89E+08	1.72E+01	2.26E+07	No
118-B-1_Shallow_4	Rad	Cesium-137	10045-97-3	pCi/g	0.74	— <sup>c</sup>	1.72E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot \text{m} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \text{m}\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-1_Shallow_5	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	19	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	3.99E+06	-- <sup>d</sup>	3.31E+01	-- <sup>d</sup>	--
118-B-1_Shallow_5	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,900	1.05E+07	3.31E+01	316,145	No
118-B-1_Shallow_5	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	44,400	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	140	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	58	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,200	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	230	500	3.31E+01	15	Yes
118-B-1_Shallow_5	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	5,000	-- <sup>d</sup>	3.31E+01	-- <sup>d</sup>	--
118-B-1_Shallow_5	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,900	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	14,300	93,717	3.31E+01	2,831	Yes
118-B-1_Shallow_5	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	260	6,000 <sup>e</sup>	3.31E+01	6,000 <sup>e</sup>	No
118-B-1_Shallow_5	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.67E+07	2.61E+07	3.31E+01	788,817	Yes
118-B-1_Shallow_5	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,200	-- <sup>d</sup>	3.31E+01	-- <sup>d</sup>	--
118-B-1_Shallow_5	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	302,000	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	40	80,585	3.31E+01	2,435	No
118-B-1_Shallow_5	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	13	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	7,400	3.89E+08	3.31E+01	1.18E+07	No
118-B-1_Shallow_5	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	34,700	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	38,600	3.89E+08	3.31E+01	1.18E+07	No
118-B-1_Shallow_5	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	3.6	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_5	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	2.4	-- <sup>c</sup>	3.31E+01	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	2,4,5-TP(2-(2,4,5-Trichlorophenoxy)propionic acid)Silvex	93-72-1	$\mu\text{g}/\text{kg}$	12	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	$\mu\text{g}/\text{kg}$	62	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	$\mu\text{g}/\text{kg}$	43	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	8.0	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Aldrin	309-00-2	$\mu\text{g}/\text{kg}$	0.50	7,293	8.60E+00	848	No
118-B-1_Shallow_6	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.27E+06	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
118-B-1_Shallow_6	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,500	1.05E+07	8.60E+00	1.22E+06	No
118-B-1_Shallow_6	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	96,400	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	360	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	430	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	8,800	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	24	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	7.0	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	7,400	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
118-B-1_Shallow_6	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,500	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,900	93,717	8.60E+00	10,897	Yes
118-B-1_Shallow_6	non-Rad	Dalapon	75-99-0	$\mu\text{g}/\text{kg}$	38	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (μg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (μg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-1_Shallow_6	non-Rad	Di-n-butylphthalate	84-74-2	μg/kg	84	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Hexavalent Chromium	18540-29-9	μg/kg	280	6,000 <sup>e</sup>	8.60E+00	6,000 <sup>e</sup>	No
118-B-1_Shallow_6	non-Rad	Iron	7439-89-6	μg/kg	2.21E+07	2.61E+07	8.60E+00	3.04E+06	Yes
118-B-1_Shallow_6	non-Rad	Lead	7439-92-1	μg/kg	5,100	-- <sup>d</sup>	8.60E+00	-- <sup>d</sup>	--
118-B-1_Shallow_6	non-Rad	Manganese	7439-96-5	μg/kg	322,000	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Mercury	7439-97-6	μg/kg	20	80,585	8.60E+00	9,370	No
118-B-1_Shallow_6	non-Rad	Methylene chloride	75-09-2	μg/kg	10	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Nickel	7440-02-0	μg/kg	11,500	3.89E+08	8.60E+00	4.52E+07	No
118-B-1_Shallow_6	non-Rad	Phenol	108-95-2	μg/kg	23	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Total_U_Isotopes	Total_U_Isotopes	μg/kg	2,250	-- <sup>f</sup>	8.60E+00	-- <sup>f</sup>	--
118-B-1_Shallow_6	non-Rad	Vanadium	7440-62-2	μg/kg	49,100	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	non-Rad	Zinc	7440-66-6	μg/kg	41,200	3.89E+08	8.60E+00	4.52E+07	No
118-B-1_Shallow_6	Rad	Cesium-137	10045-97-3	pCi/g	0.16	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	Rad	Tritium	10028-17-8	pCi/g	5.0	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	Rad	Uranium-233/234	U-233/234	pCi/g	0.61	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_6	Rad	Uranium-238	U-238	pCi/g	0.76	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	μg/kg	26	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	μg/kg	27	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	2-Methylnaphthalene	91-57-6	μg/kg	26	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	μg/kg	15	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	4-Amino-3,5,6-trichloropicolinic acid	1918-02-1	μg/kg	14	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Acetone	67-64-1	μg/kg	10	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Alpha-Chlordane	5103-71-9	μg/kg	12	24,442	5.50E+01	444	No
118-B-1_Shallow_7	non-Rad	Aluminum	7429-90-5	μg/kg	6.09E+06	-- <sup>d</sup>	5.50E+01	-- <sup>d</sup>	--
118-B-1_Shallow_7	non-Rad	Arsenic	7440-38-2	μg/kg	3,800	1.05E+07	5.50E+01	190,262	No
118-B-1_Shallow_7	non-Rad	Barium	7440-39-3	μg/kg	145,000	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Beryllium	7440-41-7	μg/kg	310	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Boron	7440-42-8	μg/kg	18,100	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Carbon tetrachloride	56-23-5	μg/kg	10	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Chromium	7440-47-3	μg/kg	9,500	-- <sup>d</sup>	5.50E+01	-- <sup>d</sup>	--
118-B-1_Shallow_7	non-Rad	Cobalt	7440-48-4	μg/kg	7,600	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Copper	7440-50-8	μg/kg	25,700	93,717	5.50E+01	1,704	Yes
118-B-1_Shallow_7	non-Rad	Dalapon	75-99-0	μg/kg	32	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Dicamba	1918-00-9	μg/kg	13	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Dieldrin	60-57-1	μg/kg	1.7	58	5.50E+01	1.0	Yes
118-B-1_Shallow_7	non-Rad	Diethylphthalate	84-66-2	μg/kg	25	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Hexavalent Chromium	18540-29-9	μg/kg	300	6,000 <sup>e</sup>	5.50E+01	6,000 <sup>e</sup>	No
118-B-1_Shallow_7	non-Rad	Iron	7439-89-6	μg/kg	1.87E+07	2.61E+07	5.50E+01	474,724	Yes
118-B-1_Shallow_7	non-Rad	Lead	7439-92-1	μg/kg	12,900	-- <sup>d</sup>	5.50E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-1_Shallow_7	non-Rad	Manganese	7439-96-5	µg/kg	340,000	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Mercury	7439-97-6	µg/kg	20	80,585	5.50E+01	1,465	No
118-B-1_Shallow_7	non-Rad	Methoxychlor	72-43-5	µg/kg	9.1	-- <sup>d</sup>	5.50E+01	-- <sup>d</sup>	--
118-B-1_Shallow_7	non-Rad	Methylene chloride	75-09-2	µg/kg	10	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Molybdenum	7439-98-7	µg/kg	2,100	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Naphthalene	91-20-3	µg/kg	19	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Nickel	7440-02-0	µg/kg	10,700	3.89E+08	5.50E+01	7.07E+06	No
118-B-1_Shallow_7	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,170	-- <sup>f</sup>	5.50E+01	-- <sup>f</sup>	--
118-B-1_Shallow_7	non-Rad	Vanadium	7440-62-2	µg/kg	40,900	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	non-Rad	Zinc	7440-66-6	µg/kg	48,700	3.89E+08	5.50E+01	7.07E+06	No
118-B-1_Shallow_7	Rad	Cesium-137	10045-97-3	pCi/g	0.58	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	Rad	Europium-152	14683-23-9	pCi/g	0.10	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	Rad	Uranium-233/234	U-233/234	pCi/g	0.72	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_7	Rad	Uranium-238	U-238	pCi/g	0.73	-- <sup>c</sup>	5.50E+01	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	99	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.01E+07	-- <sup>d</sup>	2.51E+02	-- <sup>d</sup>	--
118-B-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	7,000	1.05E+07	2.51E+02	41,707	No
118-B-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	261,000	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	580	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	38	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	24,500	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	280	500	2.51E+02	2.0	Yes
118-B-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,400	-- <sup>d</sup>	2.51E+02	-- <sup>d</sup>	--
118-B-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,300	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	28,000	93,717	2.51E+02	374	Yes
118-B-1_Shallow_Focused	non-Rad	Dicamba	1918-00-9	µg/kg	9.1	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.43E+07	2.61E+07	2.51E+02	104,065	Yes
118-B-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	34,300	-- <sup>d</sup>	2.51E+02	-- <sup>d</sup>	--
118-B-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	421,000	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	14,500	80,585	2.51E+02	321	Yes
118-B-1_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	4.7	-- <sup>d</sup>	2.51E+02	-- <sup>d</sup>	--
118-B-1_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	16	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	810	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	15,200	3.89E+08	2.51E+02	1.55E+06	No
118-B-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,679	-- <sup>f</sup>	2.51E+02	-- <sup>f</sup>	--
118-B-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,900	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	65,100	3.89E+08	2.51E+02	1.55E+06	No
118-B-1_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.35	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	0.16	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot \text{m} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \text{m}\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-1_Shallow_Focused	Rad	Tritium	10028-17-8	pCi/g	137	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.56	-- <sup>c</sup>	2.51E+02	-- <sup>c</sup>	--
118-B-10_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.46	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-10_Shallow	Rad	Nickel-63	13981-37-8	pCi/g	157	-- <sup>c</sup>	8.60E+00	-- <sup>c</sup>	--
118-B-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,500	1.05E+07	2.10E+00	4.98E+06	No
118-B-10_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	127,000	-- <sup>c</sup>	2.10E+00	-- <sup>c</sup>	--
118-B-10_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	50	500	2.10E+00	238	No
118-B-10_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,400	-- <sup>d</sup>	2.10E+00	-- <sup>d</sup>	--
118-B-10_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	16,200	-- <sup>d</sup>	2.10E+00	-- <sup>d</sup>	--
118-B-10_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	230	80,585	2.10E+00	38,374	No
118-B-3_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	11,500	-- <sup>d</sup>	2.78E+01	-- <sup>d</sup>	--
118-B-3_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	298	6,000 <sup>e</sup>	2.78E+01	6,000 <sup>e</sup>	No
118-B-3_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,200	-- <sup>d</sup>	2.78E+01	-- <sup>d</sup>	--
118-B-3_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.13	-- <sup>c</sup>	2.78E+01	-- <sup>c</sup>	--
118-B-3_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.086	-- <sup>c</sup>	2.78E+01	-- <sup>c</sup>	--
118-B-3_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.21	-- <sup>c</sup>	2.78E+01	-- <sup>c</sup>	--
118-B-3_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.18	-- <sup>c</sup>	2.78E+01	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,200	1.05E+07	6.32E+01	165,576	No
118-B-3_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	120,000	-- <sup>c</sup>	6.32E+01	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	57	-- <sup>c</sup>	6.32E+01	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	435	500	6.32E+01	7.9	Yes
118-B-3_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	17,300	-- <sup>d</sup>	6.32E+01	-- <sup>d</sup>	--
118-B-3_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	43,900	-- <sup>d</sup>	6.32E+01	-- <sup>d</sup>	--
118-B-3_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	34	80,585	6.32E+01	1,275	No
118-B-3_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.83	-- <sup>c</sup>	6.32E+01	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	0.17	-- <sup>c</sup>	6.32E+01	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	Rad	Europium-152	14683-23-9	pCi/g	1.1	-- <sup>c</sup>	6.32E+01	-- <sup>c</sup>	--
118-B-4_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	250	6,000 <sup>e</sup>	2.42E+01	6,000 <sup>e</sup>	No
118-B-4_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.32	-- <sup>c</sup>	2.42E+01	-- <sup>c</sup>	--
118-B-4_Shallow	Rad	Europium-152	14683-23-9	pCi/g	0.35	-- <sup>c</sup>	2.42E+01	-- <sup>c</sup>	--
118-B-5_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.052	-- <sup>c</sup>	2.25E+01	-- <sup>c</sup>	--
118-B-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,300	1.05E+07	2.30E+00	4.55E+06	No
118-B-5_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	47,400	-- <sup>c</sup>	2.30E+00	-- <sup>c</sup>	--
118-B-5_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,600	-- <sup>d</sup>	2.30E+00	-- <sup>d</sup>	--
118-B-5_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,000	-- <sup>d</sup>	2.30E+00	-- <sup>d</sup>	--
118-B-6_Deep	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,100	-- <sup>d</sup>	6.20E+00	-- <sup>d</sup>	--
118-B-6_Deep	Rad	Tritium	10028-17-8	pCi/g	2,780	-- <sup>c</sup>	6.20E+00	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
118-B-6_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,700	— <sup>d</sup>	1.70E+01	— <sup>d</sup>	--
118-B-6_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	80	80,585	1.70E+01	4,740	No
118-B-6_Shallow	Rad	Tritium	10028-17-8	pCi/g	241	— <sup>c</sup>	1.70E+01	— <sup>c</sup>	--
118-B-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,000	1.05E+07	2.00E-01	5.23E+07	No
118-B-7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	55,100	— <sup>c</sup>	2.00E-01	— <sup>c</sup>	--
118-B-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	280	500	2.00E-01	2,500	No
118-B-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,300	— <sup>d</sup>	2.00E-01	— <sup>d</sup>	--
118-B-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	22,900	— <sup>d</sup>	2.00E-01	— <sup>d</sup>	--
118-B-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	110	80,585	2.00E-01	402,926	No
118-B-7_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	580	1,000	2.00E-01	5,000	No
118-B-7_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	720	826	2.00E-01	4,130	No
118-B-9_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.59E+06	— <sup>d</sup>	4.20E+00	— <sup>d</sup>	--
118-B-9_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	695	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,900	1.05E+07	4.20E+00	2.49E+06	No
118-B-9_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	141,000	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	177	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	9,700	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	435	500	4.20E+00	119	Yes
118-B-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	15,700	— <sup>d</sup>	4.20E+00	— <sup>d</sup>	--
118-B-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	9,500	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	20,500	93,717	4.20E+00	22,314	No
118-B-9_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.42E+07	2.61E+07	4.20E+00	6.22E+06	Yes
118-B-9_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	26,900	— <sup>d</sup>	4.20E+00	— <sup>d</sup>	--
118-B-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	354,000	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	225	80,585	4.20E+00	19,187	No
118-B-9_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	400	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	14,800	3.89E+08	4.20E+00	9.26E+07	No
118-B-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	71,600	— <sup>c</sup>	4.20E+00	— <sup>c</sup>	--
118-B-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	250,000	3.89E+08	4.20E+00	9.26E+07	No
118-C-1_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	4.57E+06	— <sup>d</sup>	2.96E+01	— <sup>d</sup>	--
118-C-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	1.05E+07	2.96E+01	353,527	No
118-C-1_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	56,000	— <sup>c</sup>	2.96E+01	— <sup>c</sup>	--
118-C-1_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	880	— <sup>c</sup>	2.96E+01	— <sup>c</sup>	--
118-C-1_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	2,100	— <sup>c</sup>	2.96E+01	— <sup>c</sup>	--
118-C-1_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,600	— <sup>d</sup>	2.96E+01	— <sup>d</sup>	--
118-C-1_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	8,400	— <sup>c</sup>	2.96E+01	— <sup>c</sup>	--
118-C-1_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	14,700	93,717	2.96E+01	3,166	Yes
118-C-1_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	1.91E+07	2.61E+07	2.96E+01	882,089	Yes
118-C-1_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	4,900	— <sup>d</sup>	2.96E+01	— <sup>d</sup>	--
118-C-1_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	362,000	— <sup>c</sup>	2.96E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
118-C-1_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	10,200	3.89E+08	2.96E+01	1.31E+07	No
118-C-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,191	-- <sup>f</sup>	2.96E+01	-- <sup>f</sup>	--
118-C-1_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	41,600	-- <sup>c</sup>	2.96E+01	-- <sup>c</sup>	--
118-C-1_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	39,100	3.89E+08	2.96E+01	1.31E+07	No
118-C-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.30	-- <sup>c</sup>	2.96E+01	-- <sup>c</sup>	--
118-C-1_Shallow_1	Rad	Europium-152	14683-23-9	pCi/g	0.16	-- <sup>c</sup>	2.96E+01	-- <sup>c</sup>	--
118-C-1_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	0.53	-- <sup>c</sup>	2.96E+01	-- <sup>c</sup>	--
118-C-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.027	-- <sup>c</sup>	2.96E+01	-- <sup>c</sup>	--
118-C-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.74	-- <sup>c</sup>	2.96E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	4.69E+06	-- <sup>d</sup>	1.71E+01	-- <sup>d</sup>	--
118-C-1_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	1.05E+07	1.71E+01	611,953	No
118-C-1_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	54,500	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	930	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	400	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	2,200	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,200	-- <sup>d</sup>	1.71E+01	-- <sup>d</sup>	--
118-C-1_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	7,700	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,400	93,717	1.71E+01	5,481	Yes
118-C-1_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	35	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	240	6,000 <sup>e</sup>	1.71E+01	6,000 <sup>e</sup>	No
118-C-1_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	1.90E+07	2.61E+07	1.71E+01	1.53E+06	Yes
118-C-1_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	4,300	-- <sup>d</sup>	1.71E+01	-- <sup>d</sup>	--
118-C-1_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	359,000	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Methylene chloride	75-09-2	µg/kg	14	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	10,400	3.89E+08	1.71E+01	2.27E+07	No
118-C-1_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	46,300	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	40,200	3.89E+08	1.71E+01	2.27E+07	No
118-C-1_Shallow_2	Rad	Carbon-14	14762-75-5	pCi/g	12	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.15	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	1.5	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	Rad	Europium-152	14683-23-9	pCi/g	0.28	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	Rad	Nickel-63	13981-37-8	pCi/g	36	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_2	Rad	Tritium	10028-17-8	pCi/g	7.7	-- <sup>c</sup>	1.71E+01	-- <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Acetone	67-64-1	µg/kg	11	-- <sup>c</sup>	4.16E+01	-- <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	5.54E+06	-- <sup>d</sup>	4.16E+01	-- <sup>d</sup>	--
118-C-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	62	-- <sup>d</sup>	4.16E+01	-- <sup>d</sup>	--
118-C-1_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	5,800	1.05E+07	4.16E+01	251,548	No
118-C-1_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	78,400	-- <sup>c</sup>	4.16E+01	-- <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	180	-- <sup>c</sup>	4.16E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot \text{m} \text{ or } \frac{\text{pCi}}{\text{g}} \cdot \text{m}\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-C-1_Shallow_3	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	120	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	700	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	240	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,200	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	38	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	120	500	4.16E+01	12	Yes
118-C-1_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,200	— <sup>d</sup>	4.16E+01	— <sup>d</sup>	--
118-C-1_Shallow_3	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	210	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,900	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	45,200	93,717	4.16E+01	2,253	Yes
118-C-1_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	63	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	320	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	46	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.23E+07	2.61E+07	4.16E+01	627,640	Yes
118-C-1_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	23,100	— <sup>d</sup>	4.16E+01	— <sup>d</sup>	--
118-C-1_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	357,000	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	50	80,585	4.16E+01	1,937	No
118-C-1_Shallow_3	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	12	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	4,500	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,700	3.89E+08	4.16E+01	9.35E+06	No
118-C-1_Shallow_3	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	320	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,456	— <sup>f</sup>	4.16E+01	— <sup>f</sup>	--
118-C-1_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	53,200	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	77,100	3.89E+08	4.16E+01	9.35E+06	No
118-C-1_Shallow_3	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.96	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	0.042	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.14	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	Rad	Total beta radiostromtium	SR-RAD	$\text{pCi}/\text{g}$	0.28	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	1.1	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_3	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.83	— <sup>c</sup>	4.16E+01	— <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	13	— <sup>c</sup>	3.24E+01	— <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	5.10E+06	— <sup>d</sup>	3.24E+01	— <sup>d</sup>	--
118-C-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	16	— <sup>d</sup>	3.24E+01	— <sup>d</sup>	--
118-C-1_Shallow_4	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	2,400	1.05E+07	3.24E+01	322,975	No
118-C-1_Shallow_4	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	286,000	— <sup>c</sup>	3.24E+01	— <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Benzene	71-43-2	$\mu\text{g}/\text{kg}$	1.0	— <sup>c</sup>	3.24E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-C-1_Shallow_4	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	130	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	83	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	110	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	92	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	580	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	17	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	4,900	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	6,600	-- <sup>d</sup>	3.24E+01	-- <sup>d</sup>	--
118-C-1_Shallow_4	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	170	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,800	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	15,100	93,717	3.24E+01	2,893	Yes
118-C-1_Shallow_4	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	26	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	330	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	35	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.32E+07	2.61E+07	3.24E+01	805,859	Yes
118-C-1_Shallow_4	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,000	-- <sup>d</sup>	3.24E+01	-- <sup>d</sup>	--
118-C-1_Shallow_4	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	350,000	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	13	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	10,100	3.89E+08	3.24E+01	1.20E+07	No
118-C-1_Shallow_4	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	350	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,997	-- <sup>f</sup>	3.24E+01	-- <sup>f</sup>	--
118-C-1_Shallow_4	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	55,400	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Xylenes (total)	1330-20-7	$\mu\text{g}/\text{kg}$	1.0	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	42,200	3.89E+08	3.24E+01	1.20E+07	No
118-C-1_Shallow_4	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	1.2	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	0.16	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.54	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_4	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.67	-- <sup>c</sup>	3.24E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Acetone	67-64-1	$\mu\text{g}/\text{kg}$	24	-- <sup>c</sup>	8.42E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.52E+06	-- <sup>d</sup>	8.42E+01	-- <sup>d</sup>	--
118-C-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	22	-- <sup>d</sup>	8.42E+01	-- <sup>d</sup>	--
118-C-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,400	1.05E+07	8.42E+01	124,280	No
118-C-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	80,200	-- <sup>c</sup>	8.42E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	340	-- <sup>c</sup>	8.42E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	67	-- <sup>c</sup>	8.42E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	3,200	-- <sup>c</sup>	8.42E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Carbon tetrachloride	56-23-5	$\mu\text{g}/\text{kg}$	39	-- <sup>c</sup>	8.42E+01	-- <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,200	-- <sup>d</sup>	8.42E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-C-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	10,500	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	23,300	93,717	8.42E+01	1,113	Yes
118-C-1_Shallow_Focused	non-Rad	Diethylphthalate	84-66-2	$\mu\text{g}/\text{kg}$	22	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	55	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.19E+07	2.61E+07	8.42E+01	310,093	Yes
118-C-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	7,200	— <sup>d</sup>	8.42E+01	— <sup>d</sup>	--
118-C-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	446,000	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	40	80,585	8.42E+01	957	No
118-C-1_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	19	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	14,100	3.89E+08	8.42E+01	4.62E+06	No
118-C-1_Shallow_Focused	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	36	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,438	— <sup>f</sup>	8.42E+01	— <sup>f</sup>	--
118-C-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	46,400	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	45,100	3.89E+08	8.42E+01	4.62E+06	No
118-C-1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.55	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	0.20	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.68	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-1_Shallow_Focused	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.48	— <sup>c</sup>	8.42E+01	— <sup>c</sup>	--
118-C-2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.13	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-C-2_Shallow	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	79	— <sup>c</sup>	9.80E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	120	6,000 <sup>e</sup>	4.30E+00	6,000 <sup>e</sup>	No
118-C-3:2_Deep_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	120,000	— <sup>d</sup>	4.30E+00	— <sup>d</sup>	--
118-C-3:2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,110	— <sup>f</sup>	4.30E+00	— <sup>f</sup>	--
118-C-3:2_Deep_Focused	Rad	Americium-241	14596-10-2	$\text{pCi}/\text{g}$	2.7	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	171	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Cobalt-60	10198-40-0	$\text{pCi}/\text{g}$	1.7	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Europium-152	14683-23-9	$\text{pCi}/\text{g}$	9.2	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Europium-154	15585-10-1	$\text{pCi}/\text{g}$	1.5	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Nickel-63	13981-37-8	$\text{pCi}/\text{g}$	57	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Plutonium-238	13981-16-3	$\text{pCi}/\text{g}$	0.26	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	$\text{pCi}/\text{g}$	10	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Technetium-99	14133-76-7	$\text{pCi}/\text{g}$	1.2	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	$\text{pCi}/\text{g}$	38	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Uranium-234	13966-29-5	$\text{pCi}/\text{g}$	0.81	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Uranium-235	15117-96-1	$\text{pCi}/\text{g}$	0.050	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:2_Deep_Focused	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.70	— <sup>c</sup>	4.30E+00	— <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	7.58E+06	— <sup>d</sup>	6.03E+01	— <sup>d</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	5.1	— <sup>d</sup>	6.03E+01	— <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
118-C-3:3_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	6.5	-- <sup>d</sup>	6.03E+01	-- <sup>d</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,400	1.05E+07	6.03E+01	173,539	No
118-C-3:3_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	80,000	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	75	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	73	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	59	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	68	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	690	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	65	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,400	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	16,400	-- <sup>d</sup>	6.03E+01	-- <sup>d</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	100	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,400	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	38,300	93,717	6.03E+01	1,554	Yes
118-C-3:3_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	19	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	160	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	540	6,000 <sup>e</sup>	6.03E+01	6,000 <sup>e</sup>	No
118-C-3:3_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	52	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.27E+07	2.61E+07	6.03E+01	432,999	Yes
118-C-3:3_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,900	-- <sup>d</sup>	6.03E+01	-- <sup>d</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	297,000	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	800	80,585	6.03E+01	1,336	No
118-C-3:3_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	14,400	3.89E+08	6.03E+01	6.45E+06	No
118-C-3:3_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	170	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	370	1,000	6.03E+01	17	Yes
118-C-3:3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,025	-- <sup>f</sup>	6.03E+01	-- <sup>f</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,700	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	50,200	3.89E+08	6.03E+01	6.45E+06	No
118-C-3:3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.63	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.051	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-3:3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.68	-- <sup>c</sup>	6.03E+01	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	1.05E+07	5.20E+00	2.01E+06	No
118-C-4_Shallow	non-Rad	Barium	7440-39-3	µg/kg	44,800	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	41	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	44	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	46	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	45	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	130	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,800	-- <sup>d</sup>	5.20E+00	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
118-C-4_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	44	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	34	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	74	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	19	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	20,100	-- <sup>d</sup>	5.20E+00	-- <sup>d</sup>	--
118-C-4_Shallow	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	12	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	100	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	1.7	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	1,795	-- <sup>f</sup>	5.20E+00	-- <sup>f</sup>	--
118-C-4_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.57	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
118-C-4_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.60	-- <sup>c</sup>	5.20E+00	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.70E+06	-- <sup>d</sup>	1.06E+01	-- <sup>d</sup>	--
120-B-1_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	$\mu\text{g}/\text{kg}$	9.8	17.0	1.06E+01	1.6	Yes
120-B-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	170	-- <sup>d</sup>	1.06E+01	-- <sup>d</sup>	--
120-B-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,000	1.05E+07	1.06E+01	987,207	No
120-B-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	135,000	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	310	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	8,100	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	273,000	-- <sup>d</sup>	1.06E+01	-- <sup>d</sup>	--
120-B-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	9,100	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	19,800	93,717	1.06E+01	8,841	Yes
120-B-1_Shallow_Focused	non-Rad	Fluoride	16984-48-8	$\mu\text{g}/\text{kg}$	3,800	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	380	6,000 <sup>e</sup>	1.06E+01	6,000 <sup>e</sup>	No
120-B-1_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.32E+07	2.61E+07	1.06E+01	2.46E+06	Yes
120-B-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	15,400	-- <sup>d</sup>	1.06E+01	-- <sup>d</sup>	--
120-B-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	336,000	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	90	80,585	1.06E+01	7,602	No
120-B-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	2,300	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,800	3.89E+08	1.06E+01	3.67E+07	No
120-B-1_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	230	826	1.06E+01	78	Yes
120-B-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	55,900	-- <sup>c</sup>	1.06E+01	-- <sup>c</sup>	--
120-B-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	72,200	3.89E+08	1.06E+01	3.67E+07	No
126-B-3_Shallow	non-Rad	1,2,4-Trichlorobenzene	120-82-1	$\mu\text{g}/\text{kg}$	52	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	$\mu\text{g}/\text{kg}$	122	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Acenaphthene	83-32-9	$\mu\text{g}/\text{kg}$	55	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	149	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	17	-- <sup>d</sup>	8.74E+01	-- <sup>d</sup>	--
126-B-3_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,698	1.05E+07	8.74E+01	119,730	No
126-B-3_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	95,187	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
126-B-3_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	348	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	269	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	191	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	244	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	550	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	55	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Boron	7440-42-8	µg/kg	4,975	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	356	500	8.74E+01	5.7	Yes
126-B-3_Shallow	non-Rad	Carbazole	86-74-8	µg/kg	75	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,526	-- <sup>d</sup>	8.74E+01	-- <sup>d</sup>	--
126-B-3_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	122	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	11,663	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Copper	7440-50-8	µg/kg	23,531	93,717	8.74E+01	1,072	Yes
126-B-3_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	88	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	99	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	35	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	204	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	71	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	162	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,968	-- <sup>d</sup>	8.74E+01	-- <sup>d</sup>	--
126-B-3_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	472,105	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	28	80,585	8.74E+01	922	No
126-B-3_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,227	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	118	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	15,632	3.89E+08	8.74E+01	4.45E+06	No
126-B-3_Shallow	non-Rad	n-Nitrosodiphenylamine	86-30-6	µg/kg	103	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	180	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	67,526	-- <sup>c</sup>	8.74E+01	-- <sup>c</sup>	--
126-B-3_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	63,252	3.89E+08	8.74E+01	4.45E+06	No
128-B-2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	16	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	68	-- <sup>d</sup>	9.50E+01	-- <sup>d</sup>	--
128-B-2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,918	1.05E+07	9.50E+01	110,152	No
128-B-2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	71,594	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	941	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	206	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Boron	7440-42-8	µg/kg	2,750	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	17	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	190	500	9.50E+01	5.3	Yes
128-B-2_Shallow	non-Rad	Chlordane	57-74-9	µg/kg	24	24,442	9.50E+01	257	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
128-B-2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,448	-- <sup>d</sup>	9.50E+01	-- <sup>d</sup>	--
128-B-2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,253	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	14,009	93,717	9.50E+01	986	Yes
128-B-2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	36	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	32,438	-- <sup>d</sup>	9.50E+01	-- <sup>d</sup>	--
128-B-2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	357,286	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	22	80,585	9.50E+01	848	No
128-B-2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	1,077	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,421	3.89E+08	9.50E+01	4.09E+06	No
128-B-2_Shallow	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	31	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	4.0	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	$\mu\text{g}/\text{kg}$	2,006	-- <sup>f</sup>	9.50E+01	-- <sup>f</sup>	--
128-B-2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	45,088	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	45,328	3.89E+08	9.50E+01	4.09E+06	No
128-B-2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.31	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	Rad	Uranium-233/234	U-233/234	$\text{pCi}/\text{g}$	0.70	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-2_Shallow	Rad	Uranium-238	U-238	$\text{pCi}/\text{g}$	0.68	-- <sup>c</sup>	9.50E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Aluminum	7429-90-5	$\mu\text{g}/\text{kg}$	6.53E+06	-- <sup>d</sup>	1.54E+01	-- <sup>d</sup>	--
128-B-3_Shallow_1	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	190	-- <sup>d</sup>	1.54E+01	-- <sup>d</sup>	--
128-B-3_Shallow_1	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,375	1.05E+07	1.54E+01	679,506	No
128-B-3_Shallow_1	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	87,728	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	24	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	17	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	32	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	30	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	351	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	51	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,753	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,012	-- <sup>d</sup>	1.54E+01	-- <sup>d</sup>	--
128-B-3_Shallow_1	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	38	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,532	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	16,975	93,717	1.54E+01	6,086	Yes
128-B-3_Shallow_1	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Endrin	72-20-8	$\mu\text{g}/\text{kg}$	2.4	3.0	1.54E+01	0.19	Yes
128-B-3_Shallow_1	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	20	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.59E+07	2.61E+07	1.54E+01	1.70E+06	Yes
128-B-3_Shallow_1	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	5,471	-- <sup>d</sup>	1.54E+01	-- <sup>d</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
128-B-3_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	310,456	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	63	80,585	1.54E+01	5,233	No
128-B-3_Shallow_1	non-Rad	Methylene chloride	75-09-2	µg/kg	8.2	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	13,472	3.89E+08	1.54E+01	2.53E+07	No
128-B-3_Shallow_1	non-Rad	Pyrene	129-00-0	µg/kg	31	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	34,972	-- <sup>c</sup>	1.54E+01	-- <sup>c</sup>	--
128-B-3_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	40,336	3.89E+08	1.54E+01	2.53E+07	No
128-B-3_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	8.79E+06	-- <sup>d</sup>	4.57E+01	-- <sup>d</sup>	--
128-B-3_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	17	-- <sup>d</sup>	4.57E+01	-- <sup>d</sup>	--
128-B-3_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	5,473	1.05E+07	4.57E+01	228,980	No
128-B-3_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	126,504	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	450	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	6,364	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	520	500	4.57E+01	11	Yes
128-B-3_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	36,702	-- <sup>d</sup>	4.57E+01	-- <sup>d</sup>	--
128-B-3_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	8,114	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	38,045	93,717	4.57E+01	2,051	Yes
128-B-3_Shallow_2	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	544	6,000 <sup>e</sup>	4.57E+01	6,000 <sup>e</sup>	No
128-B-3_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	1.98E+07	2.61E+07	4.57E+01	571,331	Yes
128-B-3_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	40,282	-- <sup>d</sup>	4.57E+01	-- <sup>d</sup>	--
128-B-3_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	398,092	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	72	80,585	4.57E+01	1,763	No
128-B-3_Shallow_2	non-Rad	Methylene chloride	75-09-2	µg/kg	12	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	870	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	17,711	3.89E+08	4.57E+01	8.51E+06	No
128-B-3_Shallow_2	non-Rad	Silver	7440-22-4	µg/kg	241	826	4.57E+01	18	Yes
128-B-3_Shallow_2	non-Rad	Total petroleum hydrocarbons	TPH	µg/kg	431,000	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	41,172	-- <sup>c</sup>	4.57E+01	-- <sup>c</sup>	--
128-B-3_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	109,940	3.89E+08	4.57E+01	8.51E+06	No
128-B-3_Shallow_3	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	12	-- <sup>c</sup>	3.98E+01	-- <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	12	-- <sup>d</sup>	3.98E+01	-- <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Acetone	67-64-1	µg/kg	15	-- <sup>c</sup>	3.98E+01	-- <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Aldrin	309-00-2	µg/kg	0.37	7,293	3.98E+01	183	No
128-B-3_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	8.03E+06	-- <sup>d</sup>	3.98E+01	-- <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	29	-- <sup>d</sup>	3.98E+01	-- <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Aroclor-1260	11096-82-5	µg/kg	6.9	-- <sup>d</sup>	3.98E+01	-- <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	3,947	1.05E+07	3.98E+01	262,925	No
128-B-3_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	101,772	-- <sup>c</sup>	3.98E+01	-- <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	47	-- <sup>c</sup>	3.98E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
128-B-3_Shallow_3	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	53	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	55	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	43	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	425	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	64	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,624	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	590	500	3.98E+01	13	Yes
128-B-3_Shallow_3	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	0.33	24,442	3.98E+01	614	No
128-B-3_Shallow_3	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	15,508	— <sup>d</sup>	3.98E+01	— <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	100	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,273	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	18,016	93,717	3.98E+01	2,355	Yes
128-B-3_Shallow_3	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	56	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	29	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	62	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	293	6,000 <sup>e</sup>	3.98E+01	6,000 <sup>e</sup>	No
128-B-3_Shallow_3	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	50	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	1.98E+07	2.61E+07	3.98E+01	656,026	Yes
128-B-3_Shallow_3	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,356	— <sup>d</sup>	3.98E+01	— <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	380,095	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	48	80,585	3.98E+01	2,025	No
128-B-3_Shallow_3	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	3.6	— <sup>d</sup>	3.98E+01	— <sup>d</sup>	--
128-B-3_Shallow_3	non-Rad	Methylene chloride	75-09-2	$\mu\text{g}/\text{kg}$	16	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	4,700	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	13,571	3.89E+08	3.98E+01	9.77E+06	No
128-B-3_Shallow_3	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	87	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Silver	7440-22-4	$\mu\text{g}/\text{kg}$	300	826	3.98E+01	21	Yes
128-B-3_Shallow_3	non-Rad	Toluene	108-88-3	$\mu\text{g}/\text{kg}$	1.8	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	258,000	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	41,734	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Xylenes (total)	1330-20-7	$\mu\text{g}/\text{kg}$	2.5	— <sup>c</sup>	3.98E+01	— <sup>c</sup>	--
128-B-3_Shallow_3	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	49,543	3.89E+08	3.98E+01	9.77E+06	No
128-C-1_Shallow	non-Rad	Antimony	7440-36-0	$\mu\text{g}/\text{kg}$	858	— <sup>c</sup>	4.54E+01	— <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	140	— <sup>d</sup>	4.54E+01	— <sup>d</sup>	--
128-C-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g}/\text{kg}$	11	— <sup>d</sup>	4.54E+01	— <sup>d</sup>	--
128-C-1_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,270	1.05E+07	4.54E+01	230,493	No
128-C-1_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	60,255	— <sup>c</sup>	4.54E+01	— <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	29	— <sup>c</sup>	4.54E+01	— <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	31	— <sup>c</sup>	4.54E+01	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g/kg}$ or $\text{pCi/g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
128-C-1_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g/kg}$	32	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g/kg}$	30	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g/kg}$	784	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	1,682	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g/kg}$	9,818	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	990	500	4.54E+01	11	Yes
128-C-1_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	17,242	-- <sup>d</sup>	4.54E+01	-- <sup>d</sup>	--
128-C-1_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g/kg}$	38	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g/kg}$	7,402	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g/kg}$	48,008	93,717	4.54E+01	2,064	Yes
128-C-1_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g/kg}$	40	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g/kg}$	53	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g/kg}$	21	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	30,352	-- <sup>d</sup>	4.54E+01	-- <sup>d</sup>	--
128-C-1_Shallow	non-Rad	Lithium	7439-93-2	$\mu\text{g/kg}$	6,737	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g/kg}$	315,815	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	50	80,585	4.54E+01	1,775	No
128-C-1_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g/kg}$	1,900	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g/kg}$	11,617	3.89E+08	4.54E+01	8.57E+06	No
128-C-1_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g/kg}$	43	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Selenium	7782-49-2	$\mu\text{g/kg}$	1,300	1,000	4.54E+01	22	Yes
128-C-1_Shallow	non-Rad	Silver	7440-22-4	$\mu\text{g/kg}$	6,600	826	4.54E+01	18	Yes
128-C-1_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g/kg}$	39,675	-- <sup>c</sup>	4.54E+01	-- <sup>c</sup>	--
128-C-1_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g/kg}$	70,414	3.89E+08	4.54E+01	8.57E+06	No
128-C-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	6,100	1.05E+07	3.70E+01	282,822	No
128-C-1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g/kg}$	94,710	-- <sup>c</sup>	3.70E+01	-- <sup>c</sup>	--
128-C-1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g/kg}$	36	-- <sup>c</sup>	3.70E+01	-- <sup>c</sup>	--
128-C-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g/kg}$	1,797	500	3.70E+01	14	Yes
128-C-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g/kg}$	19,600	-- <sup>d</sup>	3.70E+01	-- <sup>d</sup>	--
128-C-1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g/kg}$	61,300	-- <sup>d</sup>	3.70E+01	-- <sup>d</sup>	--
128-C-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g/kg}$	200	80,585	3.70E+01	2,178	No
128-C-1_Shallow_Focused	non-Rad	Silver	7440-22-4	$\mu\text{g/kg}$	150	826	3.70E+01	22	Yes
128-C-1_Shallow_Focused	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g/kg}$	44,700	-- <sup>c</sup>	3.70E+01	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	4,4'-DDD (Dichlorodiphenyldichloroethane)	72-54-8	$\mu\text{g/kg}$	1.0	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g/kg}$	21	-- <sup>d</sup>	6.30E+00	-- <sup>d</sup>	--
1607-B1_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	$\mu\text{g/kg}$	0.52	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	$\mu\text{g/kg}$	6.95E+06	-- <sup>d</sup>	6.30E+00	-- <sup>d</sup>	--
1607-B1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	$\mu\text{g/kg}$	11	-- <sup>d</sup>	6.30E+00	-- <sup>d</sup>	--
1607-B1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	$\mu\text{g/kg}$	4,200	1.05E+07	6.30E+00	1.66E+06	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
1607-B1_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	138,000	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	270	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	98	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	2,400	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	9,600	-- <sup>d</sup>	6.30E+00	-- <sup>d</sup>	--
1607-B1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,900	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	20,200	93,717	6.30E+00	14,876	Yes
1607-B1_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	26	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	300	6,000 <sup>e</sup>	6.30E+00	6,000 <sup>e</sup>	No
1607-B1_Shallow_Focused	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.30E+07	2.61E+07	6.30E+00	4.14E+06	Yes
1607-B1_Shallow_Focused	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	8,600	-- <sup>d</sup>	6.30E+00	-- <sup>d</sup>	--
1607-B1_Shallow_Focused	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	304,000	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	230	80,585	6.30E+00	12,791	No
1607-B1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	570	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	11,300	3.89E+08	6.30E+00	6.17E+07	No
1607-B1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	42,200	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	93,900	3.89E+08	6.30E+00	6.17E+07	No
1607-B1_Shallow_Focused	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.12	-- <sup>c</sup>	6.30E+00	-- <sup>c</sup>	--
1607-B10_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	$\mu\text{g}/\text{kg}$	4.5	-- <sup>d</sup>	1.46E+01	-- <sup>d</sup>	--
1607-B10_Shallow	non-Rad	Aroclor-1254	11097-69-1	$\mu\text{g}/\text{kg}$	57	-- <sup>d</sup>	1.46E+01	-- <sup>d</sup>	--
1607-B10_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	4,500	1.05E+07	1.46E+01	716,739	No
1607-B10_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	82,400	-- <sup>c</sup>	1.46E+01	-- <sup>c</sup>	--
1607-B10_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	1.46E+01	-- <sup>c</sup>	--
1607-B10_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	160	500	1.46E+01	34	Yes
1607-B10_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	25,200	-- <sup>d</sup>	1.46E+01	-- <sup>d</sup>	--
1607-B10_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	30	-- <sup>c</sup>	1.46E+01	-- <sup>c</sup>	--
1607-B10_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	17,900	-- <sup>d</sup>	1.46E+01	-- <sup>d</sup>	--
1607-B10_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	380	80,585	1.46E+01	5,520	No
1607-B10_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	27	-- <sup>c</sup>	1.46E+01	-- <sup>c</sup>	--
1607-B10_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.054	-- <sup>c</sup>	1.46E+01	-- <sup>c</sup>	--
1607-B11_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	5,900	1.05E+07	1.02E+01	1.03E+06	No
1607-B11_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	76,500	-- <sup>c</sup>	1.02E+01	-- <sup>c</sup>	--
1607-B11_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	680	-- <sup>c</sup>	1.02E+01	-- <sup>c</sup>	--
1607-B11_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	14,000	-- <sup>d</sup>	1.02E+01	-- <sup>d</sup>	--
1607-B11_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,300	-- <sup>d</sup>	1.02E+01	-- <sup>d</sup>	--
1607-B11_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	30	80,585	1.02E+01	7,901	No
1607-B2:1_Shallow	non-Rad	2,4,5-T(2,4,5-Trichlorophenoxyacetic acid)	93-76-5	$\mu\text{g}/\text{kg}$	47	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	2,4,5-TP(2-(2,4,5-Trichlorophenoxy)propionic acid)Silvex	93-72-1	$\mu\text{g}/\text{kg}$	23	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	2,4-D(2,4-Dichlorophenoxyacetic acid)	94-75-7	$\mu\text{g}/\text{kg}$	110	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
1607-B2:1_Shallow	non-Rad	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	94-82-6	µg/kg	250	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	154	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Acetone	67-64-1	µg/kg	15	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	457	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	7,121	1.05E+07	3.57E+01	293,120	No
1607-B2:1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	386,965	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	760	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	19,810	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	128	500	3.57E+01	14	Yes
1607-B2:1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	19,106	-- <sup>d</sup>	3.57E+01	-- <sup>d</sup>	--
1607-B2:1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	12,463	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	30,171	93,717	3.57E+01	2,625	Yes
1607-B2:1_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	34	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Diethylphthalate	84-66-2	µg/kg	26	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	21	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Dinoseb(2-secButyl-4,6-dinitrophenol)	88-85-7	µg/kg	27	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Endosulfan I	959-98-8	µg/kg	1.7	4.2	3.57E+01	0.12	Yes
1607-B2:1_Shallow	non-Rad	Endrin	72-20-8	µg/kg	1.7	3.0	3.57E+01	0.084	Yes
1607-B2:1_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	269	6,000 <sup>e</sup>	3.57E+01	6,000 <sup>e</sup>	No
1607-B2:1_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	24	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	9,814	-- <sup>d</sup>	3.57E+01	-- <sup>d</sup>	--
1607-B2:1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	577,831	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	20	80,585	3.57E+01	2,257	No
1607-B2:1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,097	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	107	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	20,845	3.89E+08	3.57E+01	1.09E+07	No
1607-B2:1_Shallow	non-Rad	Silver	7440-22-4	µg/kg	140	826	3.57E+01	23	Yes
1607-B2:1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	54,015	-- <sup>c</sup>	3.57E+01	-- <sup>c</sup>	--
1607-B2:1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	67,465	3.89E+08	3.57E+01	1.09E+07	No
1607-B2:2_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	19	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	18	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	17	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Alpha-Chlordane	5103-71-9	µg/kg	0.87	24,442	2.40E+02	102	No
1607-B2:2_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.99E+06	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	510	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	330	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	6.7	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,098	1.05E+07	2.40E+02	43,583	No
1607-B2:2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	115,790	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
1607-B2:2_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	41	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	33	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	41	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	35	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	444	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	$\mu\text{g}/\text{kg}$	1.9	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	2,681	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	4,666	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	249	500	2.40E+02	2.1	Yes
1607-B2:2_Shallow	non-Rad	Chlordane	57-74-9	$\mu\text{g}/\text{kg}$	0.43	24,442	2.40E+02	102	No
1607-B2:2_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	10,679	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	64	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	8,488	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	51,480	93,717	2.40E+02	390	Yes
1607-B2:2_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	22	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	33	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Endosulfan I	959-98-8	$\mu\text{g}/\text{kg}$	6.9	4.2	2.40E+02	0.017	Yes
1607-B2:2_Shallow	non-Rad	Endosulfan II	33213-65-9	$\mu\text{g}/\text{kg}$	3.4	4.2	2.40E+02	0.017	Yes
1607-B2:2_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	79	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Heptachlor epoxide	1024-57-3	$\mu\text{g}/\text{kg}$	0.60	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Hexavalent Chromium	18540-29-9	$\mu\text{g}/\text{kg}$	436	6,000 <sup>e</sup>	2.40E+02	6,000 <sup>e</sup>	No
1607-B2:2_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	25	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Iron	7439-89-6	$\mu\text{g}/\text{kg}$	2.05E+07	2.61E+07	2.40E+02	108,746	Yes
1607-B2:2_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	10,463	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Lithium	7439-93-2	$\mu\text{g}/\text{kg}$	8,515	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Manganese	7439-96-5	$\mu\text{g}/\text{kg}$	367,714	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	240	80,585	2.40E+02	336	No
1607-B2:2_Shallow	non-Rad	Methoxychlor	72-43-5	$\mu\text{g}/\text{kg}$	15	-- <sup>d</sup>	2.40E+02	-- <sup>d</sup>	--
1607-B2:2_Shallow	non-Rad	Molybdenum	7439-98-7	$\mu\text{g}/\text{kg}$	395	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Naphthalene	91-20-3	$\mu\text{g}/\text{kg}$	17	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Nickel	7440-02-0	$\mu\text{g}/\text{kg}$	12,682	3.89E+08	2.40E+02	1.62E+06	No
1607-B2:2_Shallow	non-Rad	Phenol	108-95-2	$\mu\text{g}/\text{kg}$	17	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	66	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Strontium	7440-24-6	$\mu\text{g}/\text{kg}$	47,600	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Vanadium	7440-62-2	$\mu\text{g}/\text{kg}$	46,182	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	non-Rad	Zinc	7440-66-6	$\mu\text{g}/\text{kg}$	52,128	3.89E+08	2.40E+02	1.62E+06	No
1607-B2:2_Shallow	Rad	Cesium-137	10045-97-3	$\text{pCi}/\text{g}$	0.42	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B2:2_Shallow	Rad	Total beta radiostromtium	SR-RAD	$\text{pCi}/\text{g}$	0.90	-- <sup>c</sup>	2.40E+02	-- <sup>c</sup>	--
1607-B7_Shallow	non-Rad	Arsenic	7440-38-2	$\mu\text{g}/\text{kg}$	3,100	1.05E+07	1.23E+01	850,764	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
1607-B7_Shallow	non-Rad	Barium	7440-39-3	µg/kg	80,800	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
1607-B7_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	µg/kg	2.1	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
1607-B7_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	31	-- <sup>c</sup>	1.23E+01	-- <sup>c</sup>	--
1607-B7_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	236	500	1.23E+01	41	Yes
1607-B7_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,300	-- <sup>d</sup>	1.23E+01	-- <sup>d</sup>	--
1607-B7_Shallow	non-Rad	Lead	7439-92-1	µg/kg	43,000	-- <sup>d</sup>	1.23E+01	-- <sup>d</sup>	--
1607-B7_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	699	1,000	1.23E+01	81	Yes
1607-B7_Shallow	non-Rad	Silver	7440-22-4	µg/kg	96	826	1.23E+01	67	Yes
1607-B8_Shallow	non-Rad	4,4'-DDT (Dichlorodiphenyltrichloroethane)	50-29-3	µg/kg	27	-- <sup>d</sup>	1.43E+01	-- <sup>d</sup>	--
1607-B8_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	380	-- <sup>d</sup>	1.43E+01	-- <sup>d</sup>	--
1607-B8_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	1.05E+07	1.43E+01	731,776	No
1607-B8_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,300	-- <sup>c</sup>	1.43E+01	-- <sup>c</sup>	--
1607-B8_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	102	500	1.43E+01	35	Yes
1607-B8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,500	-- <sup>d</sup>	1.43E+01	-- <sup>d</sup>	--
1607-B8_Shallow	non-Rad	Lead	7439-92-1	µg/kg	166,000	-- <sup>d</sup>	1.43E+01	-- <sup>d</sup>	--
1607-B8_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	103	80,585	1.43E+01	5,635	No
1607-B8_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.072	-- <sup>c</sup>	1.43E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	23	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,511	1.05E+07	2.80E+01	373,728	No
1607-B9_Shallow	non-Rad	Barium	7440-39-3	µg/kg	63,408	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	163	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	78	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	115	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	115	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	41	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	479	500	2.80E+01	18	Yes
1607-B9_Shallow	non-Rad	Carbazole	86-74-8	µg/kg	25	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,970	-- <sup>d</sup>	2.80E+01	-- <sup>d</sup>	--
1607-B9_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	213	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Dieldrin	60-57-1	µg/kg	4.4	58	2.80E+01	2.1	Yes
1607-B9_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	96	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	314	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	38	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Lead	7439-92-1	µg/kg	10,831	-- <sup>d</sup>	2.80E+01	-- <sup>d</sup>	--
1607-B9_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	68	80,585	2.80E+01	2,878	No
1607-B9_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	272	-- <sup>c</sup>	2.80E+01	-- <sup>c</sup>	--
1607-B9_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	435	1,000	2.80E+01	36	Yes
600-232_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	23	-- <sup>d</sup>	1.48E+02	-- <sup>d</sup>	--
600-232_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,048	1.05E+07	1.48E+02	70,801	No



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu\text{g}}{\text{kg}} \cdot m \text{ or } \frac{\text{pCi}}{\text{g}} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Is EPC > Soil Screening Level Protective of Surface Water?
600-232_Shallow	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	58,814	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	143	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	91	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	125	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	117	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	36	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	78	500	1.48E+02	3.4	Yes
600-232_Shallow	non-Rad	Carbazole	86-74-8	$\mu\text{g}/\text{kg}$	28	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	8,520	— <sup>d</sup>	1.48E+02	— <sup>d</sup>	--
600-232_Shallow	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	178	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	18	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Di-n-octylphthalate	117-84-0	$\mu\text{g}/\text{kg}$	28	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	257	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	43	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Lead	7439-92-1	$\mu\text{g}/\text{kg}$	4,394	— <sup>d</sup>	1.48E+02	— <sup>d</sup>	--
600-232_Shallow	non-Rad	Mercury	7439-97-6	$\mu\text{g}/\text{kg}$	20	80,585	1.48E+02	545	No
600-232_Shallow	non-Rad	Pentachlorophenol	87-86-5	$\mu\text{g}/\text{kg}$	150	330	1.48E+02	2.2	Yes
600-232_Shallow	non-Rad	Pyrene	129-00-0	$\mu\text{g}/\text{kg}$	227	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-232_Shallow	non-Rad	Total petroleum hydrocarbons	TPH	$\mu\text{g}/\text{kg}$	10,059	— <sup>c</sup>	1.48E+02	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Anthracene	120-12-7	$\mu\text{g}/\text{kg}$	47	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Barium	7440-39-3	$\mu\text{g}/\text{kg}$	51,200	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	$\mu\text{g}/\text{kg}$	290	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	$\mu\text{g}/\text{kg}$	180	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	$\mu\text{g}/\text{kg}$	220	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	$\mu\text{g}/\text{kg}$	180	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Beryllium	7440-41-7	$\mu\text{g}/\text{kg}$	410	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	$\mu\text{g}/\text{kg}$	140	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Boron	7440-42-8	$\mu\text{g}/\text{kg}$	1,500	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	$\mu\text{g}/\text{kg}$	28	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Cadmium	7440-43-9	$\mu\text{g}/\text{kg}$	280	500	2.10E+00	238	Yes
600-233_Shallow_Focused	non-Rad	Chromium	7440-47-3	$\mu\text{g}/\text{kg}$	7,900	— <sup>d</sup>	2.10E+00	— <sup>d</sup>	--
600-233_Shallow_Focused	non-Rad	Chrysene	218-01-9	$\mu\text{g}/\text{kg}$	340	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Cobalt	7440-48-4	$\mu\text{g}/\text{kg}$	6,300	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Copper	7440-50-8	$\mu\text{g}/\text{kg}$	11,500	93,717	2.10E+00	44,627	No
600-233_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	$\mu\text{g}/\text{kg}$	61	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	$\mu\text{g}/\text{kg}$	68	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	$\mu\text{g}/\text{kg}$	690	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	$\mu\text{g}/\text{kg}$	110	— <sup>c</sup>	2.10E+00	— <sup>c</sup>	--



Table 7-2. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration (µg/kg or pCi/g)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection <sup>a</sup> $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Is EPC > Soil Screening Level Protective of Surface Water?
600-233_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,900	-- <sup>d</sup>	2.10E+00	-- <sup>d</sup>	--
600-233_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	270,000	-- <sup>c</sup>	2.10E+00	-- <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,300	3.89E+08	2.10E+00	1.85E+08	No
600-233_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	510	-- <sup>c</sup>	2.10E+00	-- <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Selenium	7782-49-2	µg/kg	3,000	1,000	2.10E+00	476	Yes
600-233_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	37,000	-- <sup>c</sup>	2.10E+00	-- <sup>c</sup>	--
600-233_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	33,800	3.89E+08	2.10E+00	1.85E+08	No

Notes:

- a. ECF-HANFORD-15-0129. A 70:30 source distribution is used for analytes with  $K_d \geq 2$  mL/g; a 100:0 source distribution is used for analytes with  $K_d < 2$  mL/g. These soil screening levels protective of groundwater and protective of surface water are provided on a unit-length basis. To apply these soil screening levels, divide the listed value by a representative length across the waste site decision unit in the general direction of groundwater flow to obtain the soil screening level for evaluation use. (Note that this scaling is not applicable to soil cleanup levels for arsenic, hexavalent chromium, or TPH-diesel.)
- b. ECF-100-BC5-15-0119, *Determination of Representative Lineal Dimensions for 1000BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations*.
- c. A soil screening level is not calculated because a surface water quality standard is not available for the analyte.
- d. The calculated soil screening level for the analyte is considered non-representative because: (1) breakthrough is simulated within 1,000 years for some soil columns while other soil columns (a majority) show no breakthrough (breakthrough defined as concentrations exceeding 1E-04 µg
- e. The soil screening level for hexavalent chromium is set to 6,000 µg/kg based on the evaluation in ECF-Hanford-11-0165; this value is not dependent on waste site size.
- f. No Value Required. Uranium is not modeled because uranium was not identified in the groundwater risk assessment as a COC.
- g. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and summing to provide a mass-based total uranium exposure point concentration (identified as Total\_U\_Isotopes), as described in ECF-100BC1-11-0012, *Computation of Exposure Point Concentrations for the 100-BC-1 and 100-BC-2 Source Operable Units*.
- = Not applicable or no value



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-1 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	5,400	20,000	No	27,700	No
100-B-1 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	92,800	132,000	No	480,000	No
100-B-1 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	72	563	No	2,980	No
100-B-1 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	15,900	18,500	No	320,000	No
100-B-1 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	7,800	10,200	No	74,100	No
100-B-1 Shallow Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.13	1.1	No	1.6	No
100-B-11 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.44E+06	1.18E+07	No	2.88E+07	No
100-B-11 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	1,400	130	Yes	385	Yes
100-B-11 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,900	20,000	No	27,700	No
100-B-11 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	74,400	132,000	No	480,000	No
100-B-11 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	82	1,510	No	10,000	No
100-B-11 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	5,700	3,890	Yes	5,860	No
100-B-11 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	224	563	No	2,980	No
100-B-11 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	11,600	18,500	No	320,000	No
100-B-11 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,100	15,700	No	110,000	No
100-B-11 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	20,500	22,000	No	61,000	No
100-B-11 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.46E+07	3.26E+07	No	6.81E+07	No
100-B-11 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	16,600	10,200	Yes	74,100	No
100-B-11 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	318,000	512,000	No	1.11E+06	No
100-B-11 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	18	13	Yes	29	No
100-B-11 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	551	470	Yes	3,170	No
100-B-11 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	12,200	19,100	No	200,000	No
100-B-11 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	55,000	85,100	No	140,000	No
100-B-11 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	65,000	67,800	No	366,000	No
100-B-11 Shallow Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.25	0.18	Yes	0.37	No
100-B-14:1 Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.23	1.1	No	1.6	No
100-B-14:1 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.061	1.1	No	1.6	No
100-B-14:2 Shallow 1	non-Rad	Aluminum	7429-90-5	ug/kg	5.93E+06	1.18E+07	No	2.88E+07	No
100-B-14:2 Shallow 1	non-Rad	Arsenic	7440-38-2	ug/kg	3,350	20,000	No	27,700	No
100-B-14:2 Shallow 1	non-Rad	Barium	7440-39-3	ug/kg	256,706	132,000	Yes	480,000	No
100-B-14:2 Shallow 1	non-Rad	Beryllium	7440-41-7	ug/kg	378	1,510	No	10,000	No
100-B-14:2 Shallow 1	non-Rad	Boron	7440-42-8	ug/kg	2,700	3,890	No	5,860	No
100-B-14:2 Shallow 1	non-Rad	Cadmium	7440-43-9	ug/kg	135	563	No	2,980	No
100-B-14:2 Shallow 1	non-Rad	Chromium	7440-47-3	ug/kg	8,821	18,500	No	320,000	No
100-B-14:2 Shallow 1	non-Rad	Cobalt	7440-48-4	ug/kg	8,306	15,700	No	110,000	No
100-B-14:2 Shallow 1	non-Rad	Copper	7440-50-8	ug/kg	17,751	22,000	No	61,000	No
100-B-14:2 Shallow 1	non-Rad	Iron	7439-89-6	ug/kg	2.08E+07	3.26E+07	No	6.81E+07	No
100-B-14:2 Shallow 1	non-Rad	Lead	7439-92-1	ug/kg	5,727	10,200	No	74,100	No
100-B-14:2 Shallow 1	non-Rad	Lithium	7439-93-2	ug/kg	7,236	13,300	No	19,200	No
100-B-14:2 Shallow 1	non-Rad	Manganese	7439-96-5	ug/kg	348,187	512,000	No	1.11E+06	No
100-B-14:2 Shallow 1	non-Rad	Mercury	7439-97-6	ug/kg	36	13	Yes	29	Yes
100-B-14:2 Shallow 1	non-Rad	Molybdenum	7439-98-7	ug/kg	685	470	Yes	3,170	No
100-B-14:2 Shallow 1	non-Rad	Nickel	7440-02-0	ug/kg	11,448	19,100	No	200,000	No
100-B-14:2 Shallow 1	non-Rad	Vanadium	7440-62-2	ug/kg	48,661	85,100	No	140,000	No
100-B-14:2 Shallow 1	non-Rad	Zinc	7440-66-6	ug/kg	44,656	67,800	No	366,000	No
100-B-14:2 Shallow 1	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.31	0.18	Yes	0.37	No
100-B-14:2 Shallow 2	non-Rad	Aluminum	7429-90-5	ug/kg	5.99E+06	1.18E+07	No	2.88E+07	No
100-B-14:2 Shallow 2	non-Rad	Antimony	7440-36-0	ug/kg	640	130	Yes	385	Yes
100-B-14:2 Shallow 2	non-Rad	Arsenic	7440-38-2	ug/kg	4,093	20,000	No	27,700	No
100-B-14:2 Shallow 2	non-Rad	Barium	7440-39-3	ug/kg	74,830	132,000	No	480,000	No
100-B-14:2 Shallow 2	non-Rad	Beryllium	7440-41-7	ug/kg	508	1,510	No	10,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-14:2 Shallow_2	non-Rad	Boron	7440-42-8	ug/kg	3,600	3,890	No	5,860	No
100-B-14:2 Shallow_2	non-Rad	Cadmium	7440-43-9	ug/kg	202	563	No	2,980	No
100-B-14:2 Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	10,992	18,500	No	320,000	No
100-B-14:2 Shallow_2	non-Rad	Cobalt	7440-48-4	ug/kg	8,290	15,700	No	110,000	No
100-B-14:2 Shallow_2	non-Rad	Copper	7440-50-8	ug/kg	23,864	22,000	Yes	61,000	No
100-B-14:2 Shallow_2	non-Rad	Iron	7439-89-6	ug/kg	2.09E+07	3.26E+07	No	6.81E+07	No
100-B-14:2 Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	35,014	10,200	Yes	74,100	No
100-B-14:2 Shallow_2	non-Rad	Lithium	7439-93-2	ug/kg	6,800	13,300	No	19,200	No
100-B-14:2 Shallow_2	non-Rad	Manganese	7439-96-5	ug/kg	341,978	512,000	No	1.11E+06	No
100-B-14:2 Shallow_2	non-Rad	Mercury	7439-97-6	ug/kg	118	13	Yes	29	Yes
100-B-14:2 Shallow_2	non-Rad	Molybdenum	7439-98-7	ug/kg	794	470	Yes	3,170	No
100-B-14:2 Shallow_2	non-Rad	Nickel	7440-02-0	ug/kg	15,473	19,100	No	200,000	No
100-B-14:2 Shallow_2	non-Rad	Vanadium	7440-62-2	ug/kg	46,320	85,100	No	140,000	No
100-B-14:2 Shallow_2	non-Rad	Zinc	7440-66-6	ug/kg	85,443	67,800	Yes	366,000	No
100-B-14:2 Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	5.60E+06	1.18E+07	No	2.88E+07	No
100-B-14:2 Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	3,983	20,000	No	27,700	No
100-B-14:2 Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	59,842	132,000	No	480,000	No
100-B-14:2 Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	333	1,510	No	10,000	No
100-B-14:2 Shallow_3	non-Rad	Boron	7440-42-8	ug/kg	1,511	3,890	No	5,860	No
100-B-14:2 Shallow_3	non-Rad	Cadmium	7440-43-9	ug/kg	155	563	No	2,980	No
100-B-14:2 Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	7,841	18,500	No	320,000	No
100-B-14:2 Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	7,889	15,700	No	110,000	No
100-B-14:2 Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	17,742	22,000	No	61,000	No
100-B-14:2 Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	1.87E+07	3.26E+07	No	6.81E+07	No
100-B-14:2 Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	6,871	10,200	No	74,100	No
100-B-14:2 Shallow_3	non-Rad	Lithium	7439-93-2	ug/kg	7,759	13,300	No	19,200	No
100-B-14:2 Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	335,398	512,000	No	1.11E+06	No
100-B-14:2 Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	28	13	Yes	29	No
100-B-14:2 Shallow_3	non-Rad	Molybdenum	7439-98-7	ug/kg	522	470	Yes	3,170	No
100-B-14:2 Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	11,050	19,100	No	200,000	No
100-B-14:2 Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	44,271	85,100	No	140,000	No
100-B-14:2 Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	39,869	67,800	No	366,000	No
100-B-14:2 Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.077	1.1	No	1.6	No
100-B-14:2 Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.35E+06	1.18E+07	No	2.88E+07	No
100-B-14:2 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,100	20,000	No	27,700	No
100-B-14:2 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	73,100	132,000	No	480,000	No
100-B-14:2 Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	812	1,510	No	10,000	No
100-B-14:2 Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	3,000	3,890	No	5,860	No
100-B-14:2 Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	241	563	No	2,980	No
100-B-14:2 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	9,400	18,500	No	320,000	No
100-B-14:2 Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	7,900	15,700	No	110,000	No
100-B-14:2 Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	16,500	22,000	No	61,000	No
100-B-14:2 Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.05E+07	3.26E+07	No	6.81E+07	No
100-B-14:2 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	8,900	10,200	No	74,100	No
100-B-14:2 Shallow_Focused	non-Rad	Lithium	7439-93-2	ug/kg	6,400	13,300	No	19,200	No
100-B-14:2 Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	347,000	512,000	No	1.11E+06	No
100-B-14:2 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	44	13	Yes	29	Yes
100-B-14:2 Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	12,500	19,100	No	200,000	No
100-B-14:2 Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	47,800	85,100	No	140,000	No
100-B-14:2 Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	50,800	67,800	No	366,000	No
100-B-14:3 Deep_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	5.19E+06	1.18E+07	No	2.88E+07	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-14:3 Deep Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,400	20,000	No	27,700	No
100-B-14:3 Deep Focused	non-Rad	Barium	7440-39-3	ug/kg	59,800	132,000	No	480,000	No
100-B-14:3 Deep Focused	non-Rad	Beryllium	7440-41-7	ug/kg	311	1,510	No	10,000	No
100-B-14:3 Deep Focused	non-Rad	Boron	7440-42-8	ug/kg	1,400	3,890	No	5,860	No
100-B-14:3 Deep Focused	non-Rad	Chromium	7440-47-3	ug/kg	5,600	18,500	No	320,000	No
100-B-14:3 Deep Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,900	15,700	No	110,000	No
100-B-14:3 Deep Focused	non-Rad	Copper	7440-50-8	ug/kg	15,100	22,000	No	61,000	No
100-B-14:3 Deep Focused	non-Rad	Iron	7439-89-6	ug/kg	2.55E+07	3.26E+07	No	6.81E+07	No
100-B-14:3 Deep Focused	non-Rad	Lead	7439-92-1	ug/kg	3,900	10,200	No	74,100	No
100-B-14:3 Deep Focused	non-Rad	Manganese	7439-96-5	ug/kg	355,000	512,000	No	1.11E+06	No
100-B-14:3 Deep Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	528	470	Yes	3,170	No
100-B-14:3 Deep Focused	non-Rad	Nickel	7440-02-0	ug/kg	8,500	19,100	No	200,000	No
100-B-14:3 Deep Focused	non-Rad	Silver	7440-22-4	ug/kg	164	167	No	273	No
100-B-14:3 Deep Focused	non-Rad	Vanadium	7440-62-2	ug/kg	64,400	85,100	No	140,000	No
100-B-14:3 Deep Focused	non-Rad	Zinc	7440-66-6	ug/kg	45,900	67,800	No	366,000	No
100-B-14:5 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.57E+06	1.18E+07	No	2.88E+07	No
100-B-14:5 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	310	130	Yes	385	No
100-B-14:5 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,300	20,000	No	27,700	No
100-B-14:5 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	82,100	132,000	No	480,000	No
100-B-14:5 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	360	1,510	No	10,000	No
100-B-14:5 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	4,400	3,890	Yes	5,860	No
100-B-14:5 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	190	563	No	2,980	No
100-B-14:5 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	16,500	18,500	No	320,000	No
100-B-14:5 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,900	15,700	No	110,000	No
100-B-14:5 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	17,700	22,000	No	61,000	No
100-B-14:5 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.68E+07	3.26E+07	No	6.81E+07	No
100-B-14:5 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	7,300	10,200	No	74,100	No
100-B-14:5 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	395,000	512,000	No	1.11E+06	No
100-B-14:5 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	560	470	Yes	3,170	No
100-B-14:5 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	13,000	19,100	No	200,000	No
100-B-14:5 Shallow Focused	non-Rad	Silver	7440-22-4	ug/kg	90	167	No	273	No
100-B-14:5 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	69,400	85,100	No	140,000	No
100-B-14:5 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	76,200	67,800	Yes	366,000	No
100-B-14:6 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	9.26E+06	1.18E+07	No	2.88E+07	No
100-B-14:6 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,800	20,000	No	27,700	No
100-B-14:6 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	364,000	132,000	Yes	480,000	No
100-B-14:6 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	470	1,510	No	10,000	No
100-B-14:6 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	5,800	3,890	Yes	5,860	No
100-B-14:6 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	250	563	No	2,980	No
100-B-14:6 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	49,100	18,500	Yes	320,000	No
100-B-14:6 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,600	15,700	No	110,000	No
100-B-14:6 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	21,000	22,000	No	61,000	No
100-B-14:6 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.67E+07	3.26E+07	No	6.81E+07	No
100-B-14:6 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	10,800	10,200	Yes	74,100	No
100-B-14:6 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	446,000	512,000	No	1.11E+06	No
100-B-14:6 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	1,400	13	Yes	29	Yes
100-B-14:6 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	940	470	Yes	3,170	No
100-B-14:6 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	25,100	19,100	Yes	200,000	No
100-B-14:6 Shallow Focused	non-Rad	Silver	7440-22-4	ug/kg	90	167	No	273	No
100-B-14:6 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	53,900	85,100	No	140,000	No
100-B-14:6 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	57,000	67,800	No	366,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-14:7 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.14E+07	1.18E+07	No	2.88E+07	No
100-B-14:7 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	410	130	Yes	385	Yes
100-B-14:7 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	5,200	20,000	No	27,700	No
100-B-14:7 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	128,000	132,000	No	480,000	No
100-B-14:7 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	430	1,510	No	10,000	No
100-B-14:7 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	5,400	3,890	Yes	5,860	No
100-B-14:7 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	500	563	No	2,980	No
100-B-14:7 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	25,400	18,500	Yes	320,000	No
100-B-14:7 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,600	15,700	No	110,000	No
100-B-14:7 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	21,300	22,000	No	61,000	No
100-B-14:7 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.52E+07	3.26E+07	No	6.81E+07	No
100-B-14:7 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	12,100	10,200	Yes	74,100	No
100-B-14:7 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	408,000	512,000	No	1.11E+06	No
100-B-14:7 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	80	13	Yes	29	Yes
100-B-14:7 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	760	470	Yes	3,170	No
100-B-14:7 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	22,700	19,100	Yes	200,000	No
100-B-14:7 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	52,500	85,100	No	140,000	No
100-B-14:7 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	79,400	67,800	Yes	366,000	No
100-B-16 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,300	20,000	No	27,700	No
100-B-16 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	226,000	132,000	Yes	480,000	No
100-B-16 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	360	563	No	2,980	No
100-B-16 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	15,400	18,500	No	320,000	No
100-B-16 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	8,700	10,200	No	74,100	No
100-B-16 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	30	13	Yes	29	Yes
100-B-16 Shallow Focused	non-Rad	Silver	7440-22-4	ug/kg	1,500	167	Yes	273	Yes
100-B-18 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.12E+07	1.18E+07	No	2.88E+07	No
100-B-18 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	9,300	130	Yes	385	Yes
100-B-18 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,000	20,000	No	27,700	No
100-B-18 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	1.30E+06	132,000	Yes	480,000	Yes
100-B-18 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	640	1,510	No	10,000	No
100-B-18 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	34,200	3,890	Yes	5,860	Yes
100-B-18 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	13,200	563	Yes	2,980	Yes
100-B-18 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	11,300	18,500	No	320,000	No
100-B-18 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,200	15,700	No	110,000	No
100-B-18 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	18,900	22,000	No	61,000	No
100-B-18 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.16E+07	3.26E+07	No	6.81E+07	No
100-B-18 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	25,300	10,200	Yes	74,100	No
100-B-18 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	356,000	512,000	No	1.11E+06	No
100-B-18 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	2,200	13	Yes	29	Yes
100-B-18 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	960	470	Yes	3,170	No
100-B-18 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	12,100	19,100	No	200,000	No
100-B-18 Shallow Focused	non-Rad	Selenium	7782-49-2	ug/kg	730	780	No	840	No
100-B-18 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	46,500	85,100	No	140,000	No
100-B-18 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	77,600	67,800	Yes	366,000	No
100-B-19 Shallow 1	non-Rad	Aluminum	7429-90-5	ug/kg	5.90E+06	1.18E+07	No	2.88E+07	No
100-B-19 Shallow 1	non-Rad	Antimony	7440-36-0	ug/kg	970	130	Yes	385	Yes
100-B-19 Shallow 1	non-Rad	Arsenic	7440-38-2	ug/kg	2,658	20,000	No	27,700	No
100-B-19 Shallow 1	non-Rad	Barium	7440-39-3	ug/kg	57,930	132,000	No	480,000	No
100-B-19 Shallow 1	non-Rad	Beryllium	7440-41-7	ug/kg	735	1,510	No	10,000	No
100-B-19 Shallow 1	non-Rad	Boron	7440-42-8	ug/kg	1,500	3,890	No	5,860	No
100-B-19 Shallow 1	non-Rad	Chromium	7440-47-3	ug/kg	38,860	18,500	Yes	320,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-19 Shallow 1	non-Rad	Cobalt	7440-48-4	ug/kg	9,267	15,700	No	110,000	No
100-B-19 Shallow 1	non-Rad	Copper	7440-50-8	ug/kg	17,878	22,000	No	61,000	No
100-B-19 Shallow 1	non-Rad	Iron	7439-89-6	ug/kg	2.37E+07	3.26E+07	No	6.81E+07	No
100-B-19 Shallow 1	non-Rad	Lead	7439-92-1	ug/kg	25,097	10,200	Yes	74,100	No
100-B-19 Shallow 1	non-Rad	Manganese	7439-96-5	ug/kg	341,162	512,000	No	1.11E+06	No
100-B-19 Shallow 1	non-Rad	Mercury	7439-97-6	ug/kg	60	13	Yes	29	Yes
100-B-19 Shallow 1	non-Rad	Nickel	7440-02-0	ug/kg	12,467	19,100	No	200,000	No
100-B-19 Shallow 1	non-Rad	Vanadium	7440-62-2	ug/kg	58,736	85,100	No	140,000	No
100-B-19 Shallow 1	non-Rad	Zinc	7440-66-6	ug/kg	42,877	67,800	No	366,000	No
100-B-19 Shallow 2	non-Rad	Aluminum	7429-90-5	ug/kg	8.93E+06	1.18E+07	No	2.88E+07	No
100-B-19 Shallow 2	non-Rad	Antimony	7440-36-0	ug/kg	1,194	130	Yes	385	Yes
100-B-19 Shallow 2	non-Rad	Arsenic	7440-38-2	ug/kg	3,880	20,000	No	27,700	No
100-B-19 Shallow 2	non-Rad	Barium	7440-39-3	ug/kg	97,962	132,000	No	480,000	No
100-B-19 Shallow 2	non-Rad	Beryllium	7440-41-7	ug/kg	313	1,510	No	10,000	No
100-B-19 Shallow 2	non-Rad	Boron	7440-42-8	ug/kg	2,381	3,890	No	5,860	No
100-B-19 Shallow 2	non-Rad	Cadmium	7440-43-9	ug/kg	170	563	No	2,980	No
100-B-19 Shallow 2	non-Rad	Chromium	7440-47-3	ug/kg	13,790	18,500	No	320,000	No
100-B-19 Shallow 2	non-Rad	Cobalt	7440-48-4	ug/kg	7,998	15,700	No	110,000	No
100-B-19 Shallow 2	non-Rad	Copper	7440-50-8	ug/kg	16,093	22,000	No	61,000	No
100-B-19 Shallow 2	non-Rad	Iron	7439-89-6	ug/kg	2.30E+07	3.26E+07	No	6.81E+07	No
100-B-19 Shallow 2	non-Rad	Lead	7439-92-1	ug/kg	6,415	10,200	No	74,100	No
100-B-19 Shallow 2	non-Rad	Manganese	7439-96-5	ug/kg	414,775	512,000	No	1.11E+06	No
100-B-19 Shallow 2	non-Rad	Mercury	7439-97-6	ug/kg	24	13	Yes	29	No
100-B-19 Shallow 2	non-Rad	Molybdenum	7439-98-7	ug/kg	649	470	Yes	3,170	No
100-B-19 Shallow 2	non-Rad	Nickel	7440-02-0	ug/kg	12,360	19,100	No	200,000	No
100-B-19 Shallow 2	non-Rad	Selenium	7782-49-2	ug/kg	1,280	780	Yes	840	Yes
100-B-19 Shallow 2	non-Rad	Vanadium	7440-62-2	ug/kg	53,696	85,100	No	140,000	No
100-B-19 Shallow 2	non-Rad	Zinc	7440-66-6	ug/kg	47,802	67,800	No	366,000	No
100-B-19 Shallow 4	non-Rad	Aluminum	7429-90-5	ug/kg	7.24E+06	1.18E+07	No	2.88E+07	No
100-B-19 Shallow 4	non-Rad	Arsenic	7440-38-2	ug/kg	4,048	20,000	No	27,700	No
100-B-19 Shallow 4	non-Rad	Barium	7440-39-3	ug/kg	65,972	132,000	No	480,000	No
100-B-19 Shallow 4	non-Rad	Beryllium	7440-41-7	ug/kg	452	1,510	No	10,000	No
100-B-19 Shallow 4	non-Rad	Boron	7440-42-8	ug/kg	2,400	3,890	No	5,860	No
100-B-19 Shallow 4	non-Rad	Cadmium	7440-43-9	ug/kg	122	563	No	2,980	No
100-B-19 Shallow 4	non-Rad	Chromium	7440-47-3	ug/kg	11,506	18,500	No	320,000	No
100-B-19 Shallow 4	non-Rad	Cobalt	7440-48-4	ug/kg	6,930	15,700	No	110,000	No
100-B-19 Shallow 4	non-Rad	Copper	7440-50-8	ug/kg	17,321	22,000	No	61,000	No
100-B-19 Shallow 4	non-Rad	Iron	7439-89-6	ug/kg	1.97E+07	3.26E+07	No	6.81E+07	No
100-B-19 Shallow 4	non-Rad	Lead	7439-92-1	ug/kg	9,612	10,200	No	74,100	No
100-B-19 Shallow 4	non-Rad	Manganese	7439-96-5	ug/kg	316,396	512,000	No	1.11E+06	No
100-B-19 Shallow 4	non-Rad	Mercury	7439-97-6	ug/kg	15	13	Yes	29	No
100-B-19 Shallow 4	non-Rad	Molybdenum	7439-98-7	ug/kg	359	470	No	3,170	No
100-B-19 Shallow 4	non-Rad	Nickel	7440-02-0	ug/kg	12,262	19,100	No	200,000	No
100-B-19 Shallow 4	non-Rad	Vanadium	7440-62-2	ug/kg	44,697	85,100	No	140,000	No
100-B-19 Shallow 4	non-Rad	Zinc	7440-66-6	ug/kg	41,817	67,800	No	366,000	No
100-B-19 Shallow 5	non-Rad	Aluminum	7429-90-5	ug/kg	7.69E+06	1.18E+07	No	2.88E+07	No
100-B-19 Shallow 5	non-Rad	Arsenic	7440-38-2	ug/kg	3,076	20,000	No	27,700	No
100-B-19 Shallow 5	non-Rad	Barium	7440-39-3	ug/kg	70,260	132,000	No	480,000	No
100-B-19 Shallow 5	non-Rad	Beryllium	7440-41-7	ug/kg	818	1,510	No	10,000	No
100-B-19 Shallow 5	non-Rad	Boron	7440-42-8	ug/kg	2,769	3,890	No	5,860	No
100-B-19 Shallow 5	non-Rad	Cadmium	7440-43-9	ug/kg	322	563	No	2,980	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-19 Shallow 5	non-Rad	Chromium	7440-47-3	ug/kg	10,988	18,500	No	320,000	No
100-B-19 Shallow 5	non-Rad	Cobalt	7440-48-4	ug/kg	9,504	15,700	No	110,000	No
100-B-19 Shallow 5	non-Rad	Copper	7440-50-8	ug/kg	17,154	22,000	No	61,000	No
100-B-19 Shallow 5	non-Rad	Iron	7439-89-6	ug/kg	2.60E+07	3.26E+07	No	6.81E+07	No
100-B-19 Shallow 5	non-Rad	Lead	7439-92-1	ug/kg	6,792	10,200	No	74,100	No
100-B-19 Shallow 5	non-Rad	Manganese	7439-96-5	ug/kg	388,836	512,000	No	1.11E+06	No
100-B-19 Shallow 5	non-Rad	Mercury	7439-97-6	ug/kg	6,100	13	Yes	29	Yes
100-B-19 Shallow 5	non-Rad	Molybdenum	7439-98-7	ug/kg	820	470	Yes	3,170	No
100-B-19 Shallow 5	non-Rad	Nickel	7440-02-0	ug/kg	12,222	19,100	No	200,000	No
100-B-19 Shallow 5	non-Rad	Vanadium	7440-62-2	ug/kg	66,151	85,100	No	140,000	No
100-B-19 Shallow 5	non-Rad	Zinc	7440-66-6	ug/kg	48,358	67,800	No	366,000	No
100-B-19 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.02E+07	1.18E+07	No	2.88E+07	No
100-B-19 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	1,500	130	Yes	385	Yes
100-B-19 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	5,100	20,000	No	27,700	No
100-B-19 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	173,000	132,000	Yes	480,000	No
100-B-19 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	1,200	1,510	No	10,000	No
100-B-19 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	3,500	3,890	No	5,860	No
100-B-19 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	370	563	No	2,980	No
100-B-19 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	17,600	18,500	No	320,000	No
100-B-19 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,000	15,700	No	110,000	No
100-B-19 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	22,800	22,000	Yes	61,000	No
100-B-19 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	3.96E+07	3.26E+07	Yes	6.81E+07	No
100-B-19 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	17,400	10,200	Yes	74,100	No
100-B-19 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	376,000	512,000	No	1.11E+06	No
100-B-19 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	17,100	13	Yes	29	Yes
100-B-19 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	1,100	470	Yes	3,170	No
100-B-19 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	12,000	19,100	No	200,000	No
100-B-19 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	91,300	85,100	Yes	140,000	No
100-B-19 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	52,200	67,800	No	366,000	No
100-B-20 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.50E+06	1.18E+07	No	2.88E+07	No
100-B-20 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,800	20,000	No	27,700	No
100-B-20 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	72,700	132,000	No	480,000	No
100-B-20 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	320	1,510	No	10,000	No
100-B-20 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	3,700	3,890	No	5,860	No
100-B-20 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	12,100	18,500	No	320,000	No
100-B-20 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	11,200	15,700	No	110,000	No
100-B-20 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	43,300	22,000	Yes	61,000	No
100-B-20 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.17E+07	3.26E+07	No	6.81E+07	No
100-B-20 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	20,900	10,200	Yes	74,100	No
100-B-20 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	354,000	512,000	No	1.11E+06	No
100-B-20 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	327	13	Yes	29	Yes
100-B-20 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	599	470	Yes	3,170	No
100-B-20 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	10,800	19,100	No	200,000	No
100-B-20 Shallow Focused	non-Rad	Selenium	7782-49-2	ug/kg	440	780	No	840	No
100-B-20 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	53,900	85,100	No	140,000	No
100-B-20 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	326,000	67,800	Yes	366,000	No
100-B-21:2 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	9.07E+06	1.18E+07	No	2.88E+07	No
100-B-21:2 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	5,978	20,000	No	27,700	No
100-B-21:2 Shallow	non-Rad	Barium	7440-39-3	ug/kg	88,995	132,000	No	480,000	No
100-B-21:2 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	190	1,510	No	10,000	No
100-B-21:2 Shallow	non-Rad	Boron	7440-42-8	ug/kg	2,390	3,890	No	5,860	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-21:2 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	310	563	No	2,980	No
100-B-21:2 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	15,640	18,500	No	320,000	No
100-B-21:2 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	7,955	15,700	No	110,000	No
100-B-21:2 Shallow	non-Rad	Copper	7440-50-8	ug/kg	20,744	22,000	No	61,000	No
100-B-21:2 Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.37E+07	3.26E+07	No	6.81E+07	No
100-B-21:2 Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,454	10,200	No	74,100	No
100-B-21:2 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	359,421	512,000	No	1.11E+06	No
100-B-21:2 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	1,390	470	Yes	3,170	No
100-B-21:2 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	16,027	19,100	No	200,000	No
100-B-21:2 Shallow	non-Rad	Silver	7440-22-4	ug/kg	390	167	Yes	273	Yes
100-B-21:2 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	49,852	85,100	No	140,000	No
100-B-21:2 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	43,836	67,800	No	366,000	No
100-B-21:2 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.075	1.1	No	1.6	No
100-B-21:3 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	7.91E+06	1.18E+07	No	2.88E+07	No
100-B-21:3 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	369	130	Yes	385	No
100-B-21:3 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,247	20,000	No	27,700	No
100-B-21:3 Shallow	non-Rad	Barium	7440-39-3	ug/kg	67,083	132,000	No	480,000	No
100-B-21:3 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	341	1,510	No	10,000	No
100-B-21:3 Shallow	non-Rad	Boron	7440-42-8	ug/kg	2,104	3,890	No	5,860	No
100-B-21:3 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	75	563	No	2,980	No
100-B-21:3 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,795	18,500	No	320,000	No
100-B-21:3 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	9,788	15,700	No	110,000	No
100-B-21:3 Shallow	non-Rad	Copper	7440-50-8	ug/kg	17,573	22,000	No	61,000	No
100-B-21:3 Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.51E+07	3.26E+07	No	6.81E+07	No
100-B-21:3 Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,049	10,200	No	74,100	No
100-B-21:3 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	388,389	512,000	No	1.11E+06	No
100-B-21:3 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
100-B-21:3 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	379	470	No	3,170	No
100-B-21:3 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,176	19,100	No	200,000	No
100-B-21:3 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	66,201	85,100	No	140,000	No
100-B-21:3 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	50,545	67,800	No	366,000	No
100-B-21:3 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.096	1.1	No	1.6	No
100-B-21:4 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	7.62E+06	1.18E+07	No	2.88E+07	No
100-B-21:4 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	866	130	Yes	385	Yes
100-B-21:4 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,557	20,000	No	27,700	No
100-B-21:4 Shallow	non-Rad	Barium	7440-39-3	ug/kg	63,635	132,000	No	480,000	No
100-B-21:4 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	286	1,510	No	10,000	No
100-B-21:4 Shallow	non-Rad	Boron	7440-42-8	ug/kg	2,191	3,890	No	5,860	No
100-B-21:4 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	120	563	No	2,980	No
100-B-21:4 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	32,036	18,500	Yes	320,000	No
100-B-21:4 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	9,438	15,700	No	110,000	No
100-B-21:4 Shallow	non-Rad	Copper	7440-50-8	ug/kg	17,168	22,000	No	61,000	No
100-B-21:4 Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.58E+07	3.26E+07	No	6.81E+07	No
100-B-21:4 Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,140	10,200	No	74,100	No
100-B-21:4 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	363,889	512,000	No	1.11E+06	No
100-B-21:4 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	47	13	Yes	29	Yes
100-B-21:4 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	494	470	Yes	3,170	No
100-B-21:4 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,084	19,100	No	200,000	No
100-B-21:4 Shallow	non-Rad	Selenium	7782-49-2	ug/kg	1,040	780	Yes	840	Yes
100-B-21:4 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,703	3,210	No	4,042	No
100-B-21:4 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	68,392	85,100	No	140,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-21:4 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	50,652	67,800	No	366,000	No
100-B-21:4 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	45	1.1	Yes	1.6	Yes
100-B-21:4 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.25	0.0084	Yes	0.039	Yes
100-B-21:4 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.049	0.025	Yes	0.033	Yes
100-B-21:4 Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.4	0.18	Yes	0.37	Yes
100-B-21:4 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	1.1	No	1.5	No
100-B-21:4 Shallow	Rad	Uranium-238	U-238	pCi/g	0.57	1.1	No	1.2	No
100-B-22:2 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.19E+07	1.18E+07	Yes	2.88E+07	No
100-B-22:2 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	1,080	130	Yes	385	Yes
100-B-22:2 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	6,450	20,000	No	27,700	No
100-B-22:2 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	110,000	132,000	No	480,000	No
100-B-22:2 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	1,700	1,510	Yes	10,000	No
100-B-22:2 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	9,230	3,890	Yes	5,860	Yes
100-B-22:2 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	1,020	563	Yes	2,980	No
100-B-22:2 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	24,800	18,500	Yes	320,000	No
100-B-22:2 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	13,000	15,700	No	110,000	No
100-B-22:2 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	66,700	22,000	Yes	61,000	Yes
100-B-22:2 Shallow Focused	non-Rad	Fluoride	16984-48-8	ug/kg	1,600	2,810	No	73,300	No
100-B-22:2 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	4.43E+07	3.26E+07	Yes	6.81E+07	No
100-B-22:2 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	125,000	10,200	Yes	74,100	Yes
100-B-22:2 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	479,000	512,000	No	1.11E+06	No
100-B-22:2 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	319	13	Yes	29	Yes
100-B-22:2 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	2,000	470	Yes	3,170	No
100-B-22:2 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	21,300	19,100	Yes	200,000	No
100-B-22:2 Shallow Focused	non-Rad	Nitrate	14797-55-8	ug/kg	16,400	52,000	No	906,000	No
100-B-22:2 Shallow Focused	non-Rad	Silver	7440-22-4	ug/kg	1,960	167	Yes	273	Yes
100-B-22:2 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	67,600	85,100	No	140,000	No
100-B-22:2 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	176,000	67,800	Yes	366,000	No
100-B-23 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.95E+06	1.18E+07	No	2.88E+07	No
100-B-23 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	270	130	Yes	385	No
100-B-23 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,400	20,000	No	27,700	No
100-B-23 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	118,000	132,000	No	480,000	No
100-B-23 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	450	1,510	No	10,000	No
100-B-23 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	14,100	3,890	Yes	5,860	Yes
100-B-23 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	1,700	563	Yes	2,980	No
100-B-23 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	14,000	18,500	No	320,000	No
100-B-23 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	7,700	15,700	No	110,000	No
100-B-23 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	21,600	22,000	No	61,000	No
100-B-23 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.07E+07	3.26E+07	No	6.81E+07	No
100-B-23 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	73,800	10,200	Yes	74,100	No
100-B-23 Shallow Focused	non-Rad	Lithium	7439-93-2	ug/kg	8,600	13,300	No	19,200	No
100-B-23 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	352,000	512,000	No	1.11E+06	No
100-B-23 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	8,200	13	Yes	29	Yes
100-B-23 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	710	470	Yes	3,170	No
100-B-23 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	13,600	19,100	No	200,000	No
100-B-23 Shallow Focused	non-Rad	Selenium	7782-49-2	ug/kg	570	780	No	840	No
100-B-23 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	42,900	85,100	No	140,000	No
100-B-23 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	1.31E+06	67,800	Yes	366,000	Yes
100-B-25 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	8.14E+06	1.18E+07	No	2.88E+07	No
100-B-25 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,556	20,000	No	27,700	No
100-B-25 Shallow	non-Rad	Barium	7440-39-3	ug/kg	81,242	132,000	No	480,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-25 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	246	1,510	No	10,000	No
100-B-25 Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,005	3,890	No	5,860	No
100-B-25 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	97	563	No	2,980	No
100-B-25 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	15,581	18,500	No	320,000	No
100-B-25 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,179	15,700	No	110,000	No
100-B-25 Shallow	non-Rad	Copper	7440-50-8	ug/kg	17,196	22,000	No	61,000	No
100-B-25 Shallow	non-Rad	Iron	7439-89-6	ug/kg	1.69E+07	3.26E+07	No	6.81E+07	No
100-B-25 Shallow	non-Rad	Lead	7439-92-1	ug/kg	4,006	10,200	No	74,100	No
100-B-25 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	281,444	512,000	No	1.11E+06	No
100-B-25 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	44	13	Yes	29	Yes
100-B-25 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	279	470	No	3,170	No
100-B-25 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	16,459	19,100	No	200,000	No
100-B-25 Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,156	3,210	No	4,042	No
100-B-25 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	37,033	85,100	No	140,000	No
100-B-25 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	35,105	67,800	No	366,000	No
100-B-25 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.55	1.1	No	1.6	No
100-B-25 Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.40	0.18	Yes	0.37	Yes
100-B-25 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.78	1.1	No	1.5	No
100-B-25 Shallow	Rad	Uranium-238	U-238	pCi/g	0.72	1.1	No	1.2	No
100-B-26 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.16E+06	1.18E+07	No	2.88E+07	No
100-B-26 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	5,200	20,000	No	27,700	No
100-B-26 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	84,700	132,000	No	480,000	No
100-B-26 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	441	1,510	No	10,000	No
100-B-26 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	1,800	3,890	No	5,860	No
100-B-26 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	501	563	No	2,980	No
100-B-26 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	39,300	18,500	Yes	320,000	No
100-B-26 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	6,400	15,700	No	110,000	No
100-B-26 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	20,200	22,000	No	61,000	No
100-B-26 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	1.79E+07	3.26E+07	No	6.81E+07	No
100-B-26 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	17,600	10,200	Yes	74,100	No
100-B-26 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	262,000	512,000	No	1.11E+06	No
100-B-26 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	16	13	Yes	29	No
100-B-26 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	206	470	No	3,170	No
100-B-26 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	16,500	19,100	No	200,000	No
100-B-26 Shallow Focused	non-Rad	Selenium	7782-49-2	ug/kg	513	780	No	840	No
100-B-26 Shallow Focused	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	3,513	3,210	Yes	4,042	No
100-B-26 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	33,700	85,100	No	140,000	No
100-B-26 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	108,000	67,800	Yes	366,000	No
100-B-26 Shallow Focused	Rad	Cesium-137	10045-97-3	pCi/g	3.1	1.1	Yes	1.6	Yes
100-B-26 Shallow Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	1.1	Yes	1.5	No
100-B-26 Shallow Focused	Rad	Uranium-238	U-238	pCi/g	1.2	1.1	Yes	1.2	No
100-B-27 Deep	non-Rad	Aluminum	7429-90-5	ug/kg	1.23E+07	1.18E+07	Yes	2.88E+07	No
100-B-27 Deep	non-Rad	Antimony	7440-36-0	ug/kg	464	130	Yes	385	Yes
100-B-27 Deep	non-Rad	Arsenic	7440-38-2	ug/kg	4,466	20,000	No	27,700	No
100-B-27 Deep	non-Rad	Barium	7440-39-3	ug/kg	149,745	132,000	Yes	480,000	No
100-B-27 Deep	non-Rad	Beryllium	7440-41-7	ug/kg	436	1,510	No	10,000	No
100-B-27 Deep	non-Rad	Boron	7440-42-8	ug/kg	1,099	3,890	No	5,860	No
100-B-27 Deep	non-Rad	Cadmium	7440-43-9	ug/kg	102	563	No	2,980	No
100-B-27 Deep	non-Rad	Chromium	7440-47-3	ug/kg	13,667	18,500	No	320,000	No
100-B-27 Deep	non-Rad	Cobalt	7440-48-4	ug/kg	14,425	15,700	No	110,000	No
100-B-27 Deep	non-Rad	Copper	7440-50-8	ug/kg	28,589	22,000	Yes	61,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-27_Deep	non-Rad	Iron	7439-89-6	ug/kg	3.61E+07	3.26E+07	Yes	6.81E+07	No
100-B-27_Deep	non-Rad	Lead	7439-92-1	ug/kg	7,359	10,200	No	74,100	No
100-B-27_Deep	non-Rad	Manganese	7439-96-5	ug/kg	525,815	512,000	Yes	1.11E+06	No
100-B-27_Deep	non-Rad	Molybdenum	7439-98-7	ug/kg	471	470	Yes	3,170	No
100-B-27_Deep	non-Rad	Nickel	7440-02-0	ug/kg	15,089	19,100	No	200,000	No
100-B-27_Deep	non-Rad	Silver	7440-22-4	ug/kg	208	167	Yes	273	No
100-B-27_Deep	non-Rad	Vanadium	7440-62-2	ug/kg	86,865	85,100	Yes	140,000	No
100-B-27_Deep	non-Rad	Zinc	7440-66-6	ug/kg	69,869	67,800	Yes	366,000	No
100-B-28_Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	8.52E+06	1.18E+07	No	2.88E+07	No
100-B-28_Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	4,446	20,000	No	27,700	No
100-B-28_Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	99,189	132,000	No	480,000	No
100-B-28_Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	358	1,510	No	10,000	No
100-B-28_Shallow_1	non-Rad	Boron	7440-42-8	ug/kg	5,012	3,890	Yes	5,860	No
100-B-28_Shallow_1	non-Rad	Cadmium	7440-43-9	ug/kg	405	563	No	2,980	No
100-B-28_Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	11,645	18,500	No	320,000	No
100-B-28_Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	10,094	15,700	No	110,000	No
100-B-28_Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	21,585	22,000	No	61,000	No
100-B-28_Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	2.68E+07	3.26E+07	No	6.81E+07	No
100-B-28_Shallow_1	non-Rad	Lead	7439-92-1	ug/kg	8,333	10,200	No	74,100	No
100-B-28_Shallow_1	non-Rad	Manganese	7439-96-5	ug/kg	401,359	512,000	No	1.11E+06	No
100-B-28_Shallow_1	non-Rad	Mercury	7439-97-6	ug/kg	76	13	Yes	29	Yes
100-B-28_Shallow_1	non-Rad	Molybdenum	7439-98-7	ug/kg	521	470	Yes	3,170	No
100-B-28_Shallow_1	non-Rad	Nickel	7440-02-0	ug/kg	13,397	19,100	No	200,000	No
100-B-28_Shallow_1	non-Rad	Vanadium	7440-62-2	ug/kg	64,955	85,100	No	140,000	No
100-B-28_Shallow_1	non-Rad	Zinc	7440-66-6	ug/kg	65,498	67,800	No	366,000	No
100-B-28_Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	1.06E+07	1.18E+07	No	2.88E+07	No
100-B-28_Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	4,728	20,000	No	27,700	No
100-B-28_Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	85,885	132,000	No	480,000	No
100-B-28_Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	357	1,510	No	10,000	No
100-B-28_Shallow_3	non-Rad	Boron	7440-42-8	ug/kg	2,119	3,890	No	5,860	No
100-B-28_Shallow_3	non-Rad	Cadmium	7440-43-9	ug/kg	507	563	No	2,980	No
100-B-28_Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	17,013	18,500	No	320,000	No
100-B-28_Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	11,408	15,700	No	110,000	No
100-B-28_Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	18,934	22,000	No	61,000	No
100-B-28_Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	2.58E+07	3.26E+07	No	6.81E+07	No
100-B-28_Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	7,178	10,200	No	74,100	No
100-B-28_Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	524,239	512,000	Yes	1.11E+06	No
100-B-28_Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	163	13	Yes	29	Yes
100-B-28_Shallow_3	non-Rad	Molybdenum	7439-98-7	ug/kg	370	470	No	3,170	No
100-B-28_Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	17,186	19,100	No	200,000	No
100-B-28_Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	64,702	85,100	No	140,000	No
100-B-28_Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	572,012	67,800	Yes	366,000	Yes
100-B-28_Shallow_5	non-Rad	Aluminum	7429-90-5	ug/kg	8.80E+06	1.18E+07	No	2.88E+07	No
100-B-28_Shallow_5	non-Rad	Antimony	7440-36-0	ug/kg	899	130	Yes	385	Yes
100-B-28_Shallow_5	non-Rad	Arsenic	7440-38-2	ug/kg	4,877	20,000	No	27,700	No
100-B-28_Shallow_5	non-Rad	Barium	7440-39-3	ug/kg	73,328	132,000	No	480,000	No
100-B-28_Shallow_5	non-Rad	Beryllium	7440-41-7	ug/kg	324	1,510	No	10,000	No
100-B-28_Shallow_5	non-Rad	Boron	7440-42-8	ug/kg	1,868	3,890	No	5,860	No
100-B-28_Shallow_5	non-Rad	Cadmium	7440-43-9	ug/kg	234	563	No	2,980	No
100-B-28_Shallow_5	non-Rad	Chromium	7440-47-3	ug/kg	19,369	18,500	Yes	320,000	No
100-B-28_Shallow_5	non-Rad	Cobalt	7440-48-4	ug/kg	9,470	15,700	No	110,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-28 Shallow 5	non-Rad	Copper	7440-50-8	ug/kg	19,492	22,000	No	61,000	No
100-B-28 Shallow 5	non-Rad	Iron	7439-89-6	ug/kg	2.50E+07	3.26E+07	No	6.81E+07	No
100-B-28 Shallow 5	non-Rad	Lead	7439-92-1	ug/kg	12,508	10,200	Yes	74,100	No
100-B-28 Shallow 5	non-Rad	Manganese	7439-96-5	ug/kg	389,598	512,000	No	1.11E+06	No
100-B-28 Shallow 5	non-Rad	Mercury	7439-97-6	ug/kg	77	13	Yes	29	Yes
100-B-28 Shallow 5	non-Rad	Molybdenum	7439-98-7	ug/kg	775	470	Yes	3,170	No
100-B-28 Shallow 5	non-Rad	Nickel	7440-02-0	ug/kg	14,338	19,100	No	200,000	No
100-B-28 Shallow 5	non-Rad	Vanadium	7440-62-2	ug/kg	58,291	85,100	No	140,000	No
100-B-28 Shallow 5	non-Rad	Zinc	7440-66-6	ug/kg	51,942	67,800	No	366,000	No
100-B-28 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.85E+07	1.18E+07	Yes	2.88E+07	No
100-B-28 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	1,000	130	Yes	385	Yes
100-B-28 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	8,020	20,000	No	27,700	No
100-B-28 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	98,100	132,000	No	480,000	No
100-B-28 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	572	1,510	No	10,000	No
100-B-28 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	1,710	3,890	No	5,860	No
100-B-28 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	141	563	No	2,980	No
100-B-28 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	50,100	18,500	Yes	320,000	No
100-B-28 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	10,600	15,700	No	110,000	No
100-B-28 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	31,000	22,000	Yes	61,000	No
100-B-28 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	3.69E+07	3.26E+07	Yes	6.81E+07	No
100-B-28 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	12,700	10,200	Yes	74,100	No
100-B-28 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	494,000	512,000	No	1.11E+06	No
100-B-28 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	804	13	Yes	29	Yes
100-B-28 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	566	470	Yes	3,170	No
100-B-28 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	17,200	19,100	No	200,000	No
100-B-28 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	106,000	85,100	Yes	140,000	No
100-B-28 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	81,700	67,800	Yes	366,000	No
100-B-31 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	7.24E+06	1.18E+07	No	2.88E+07	No
100-B-31 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	1,096	130	Yes	385	Yes
100-B-31 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	5,007	20,000	No	27,700	No
100-B-31 Shallow	non-Rad	Barium	7440-39-3	ug/kg	66,123	132,000	No	480,000	No
100-B-31 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	263	1,510	No	10,000	No
100-B-31 Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,934	3,890	No	5,860	No
100-B-31 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	159	563	No	2,980	No
100-B-31 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	17,815	18,500	No	320,000	No
100-B-31 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	8,635	15,700	No	110,000	No
100-B-31 Shallow	non-Rad	Copper	7440-50-8	ug/kg	30,009	22,000	Yes	61,000	No
100-B-31 Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.37E+07	3.26E+07	No	6.81E+07	No
100-B-31 Shallow	non-Rad	Lead	7439-92-1	ug/kg	78,974	10,200	Yes	74,100	Yes
100-B-31 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	376,677	512,000	No	1.11E+06	No
100-B-31 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	112	13	Yes	29	Yes
100-B-31 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	4,483	470	Yes	3,170	Yes
100-B-31 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,098	19,100	No	200,000	No
100-B-31 Shallow	non-Rad	Selenium	7782-49-2	ug/kg	856	780	Yes	840	Yes
100-B-31 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	55,070	85,100	No	140,000	No
100-B-31 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	63,292	67,800	No	366,000	No
100-B-32 Shallow Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.52	1.1	No	1.6	No
100-B-33 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.07E+07	1.18E+07	No	2.88E+07	No
100-B-33 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,550	20,000	No	27,700	No
100-B-33 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	102,000	132,000	No	480,000	No
100-B-33 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	408	1,510	No	10,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-33_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	4,670	3,890	Yes	5,860	No
100-B-33_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	133	563	No	2,980	No
100-B-33_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	13,100	18,500	No	320,000	No
100-B-33_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,710	15,700	No	110,000	No
100-B-33_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	16,500	22,000	No	61,000	No
100-B-33_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.47E+07	3.26E+07	No	6.81E+07	No
100-B-33_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	6,870	10,200	No	74,100	No
100-B-33_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	409,000	512,000	No	1.11E+06	No
100-B-33_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	12	13	No	29	No
100-B-33_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	13,200	19,100	No	200,000	No
100-B-33_Shallow_Focused	non-Rad	Selenium	7782-49-2	ug/kg	898	780	Yes	840	Yes
100-B-33_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,447	3,210	No	4,042	No
100-B-33_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	58,200	85,100	No	140,000	No
100-B-33_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	48,700	67,800	No	366,000	No
100-B-33_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16	1.1	No	1.6	No
100-B-33_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	1.1	No	1.5	No
100-B-33_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.49	1.1	No	1.2	No
100-B-35:1_Deep_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.39E+07	1.18E+07	Yes	2.88E+07	No
100-B-35:1_Deep_Focused	non-Rad	Antimony	7440-36-0	ug/kg	1,300	130	Yes	385	Yes
100-B-35:1_Deep_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	9,600	20,000	No	27,700	No
100-B-35:1_Deep_Focused	non-Rad	Barium	7440-39-3	ug/kg	81,600	132,000	No	480,000	No
100-B-35:1_Deep_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	280	1,510	No	10,000	No
100-B-35:1_Deep_Focused	non-Rad	Boron	7440-42-8	ug/kg	1,500	3,890	No	5,860	No
100-B-35:1_Deep_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	220	563	No	2,980	No
100-B-35:1_Deep_Focused	non-Rad	Chromium	7440-47-3	ug/kg	15,300	18,500	No	320,000	No
100-B-35:1_Deep_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	11,900	15,700	No	110,000	No
100-B-35:1_Deep_Focused	non-Rad	Copper	7440-50-8	ug/kg	23,200	22,000	Yes	61,000	No
100-B-35:1_Deep_Focused	non-Rad	Iron	7439-89-6	ug/kg	3.19E+07	3.26E+07	No	6.81E+07	No
100-B-35:1_Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	12,200	10,200	Yes	74,100	No
100-B-35:1_Deep_Focused	non-Rad	Manganese	7439-96-5	ug/kg	502,000	512,000	No	1.11E+06	No
100-B-35:1_Deep_Focused	non-Rad	Nickel	7440-02-0	ug/kg	17,500	19,100	No	200,000	No
100-B-35:1_Deep_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	72,200	85,100	No	140,000	No
100-B-35:1_Deep_Focused	non-Rad	Zinc	7440-66-6	ug/kg	59,900	67,800	No	366,000	No
100-B-35:1_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	8.57E+06	1.18E+07	No	2.88E+07	No
100-B-35:1_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	1,061	130	Yes	385	Yes
100-B-35:1_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	5,148	20,000	No	27,700	No
100-B-35:1_Shallow	non-Rad	Barium	7440-39-3	ug/kg	64,766	132,000	No	480,000	No
100-B-35:1_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	126	1,510	No	10,000	No
100-B-35:1_Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,423	3,890	No	5,860	No
100-B-35:1_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	151	563	No	2,980	No
100-B-35:1_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	8,942	18,500	No	320,000	No
100-B-35:1_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	9,325	15,700	No	110,000	No
100-B-35:1_Shallow	non-Rad	Copper	7440-50-8	ug/kg	19,504	22,000	No	61,000	No
100-B-35:1_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.49E+07	3.26E+07	No	6.81E+07	No
100-B-35:1_Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,650	10,200	No	74,100	No
100-B-35:1_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	368,864	512,000	No	1.11E+06	No
100-B-35:1_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	14	13	Yes	29	No
100-B-35:1_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	370	470	No	3,170	No
100-B-35:1_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,876	19,100	No	200,000	No
100-B-35:1_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	61,150	85,100	No	140,000	No
100-B-35:1_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	62,837	67,800	No	366,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-35:2 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	5.35E+06	1.18E+07	No	2.88E+07	No
100-B-35:2 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	3,570	130	Yes	385	Yes
100-B-35:2 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	1,620	20,000	No	27,700	No
100-B-35:2 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	51,600	132,000	No	480,000	No
100-B-35:2 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	318	1,510	No	10,000	No
100-B-35:2 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	11,500	18,500	No	320,000	No
100-B-35:2 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	7,460	15,700	No	110,000	No
100-B-35:2 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	21,800	22,000	No	61,000	No
100-B-35:2 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	1.58E+07	3.26E+07	No	6.81E+07	No
100-B-35:2 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	12,700	10,200	Yes	74,100	No
100-B-35:2 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	234,000	512,000	No	1.11E+06	No
100-B-35:2 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	9.3	13	No	29	No
100-B-35:2 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	9,660	19,100	No	200,000	No
100-B-35:2 Shallow Focused	non-Rad	Silver	7440-22-4	ug/kg	569	167	Yes	273	Yes
100-B-35:2 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	48,400	85,100	No	140,000	No
100-B-35:2 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	158,000	67,800	Yes	366,000	No
100-B-5 Deep	non-Rad	Chromium	7440-47-3	ug/kg	297,000	18,500	Yes	320,000	No
100-B-5 Deep	non-Rad	Lead	7439-92-1	ug/kg	8,200	10,200	No	74,100	No
100-B-5 Deep	non-Rad	Mercury	7439-97-6	ug/kg	5,040	13	Yes	29	Yes
100-B-5 Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,230	3,210	No	4,042	No
100-B-5 Deep	Rad	Cesium-137	10045-97-3	pCi/g	22	1.1	Yes	1.6	Yes
100-B-5 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	1.5	0.0084	Yes	0.039	Yes
100-B-5 Deep	Rad	Europium-154	15585-10-1	pCi/g	1.4	0.033	Yes	0.079	Yes
100-B-5 Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.26	0.0038	Yes	0.019	Yes
100-B-5 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	3.4	0.025	Yes	0.033	Yes
100-B-5 Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.9	0.18	Yes	0.37	Yes
100-B-5 Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.79	1.1	No	1.5	No
100-B-5 Deep	Rad	Uranium-238	U-238	pCi/g	0.75	1.1	No	1.2	No
100-B-5 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	12,803	18,500	No	320,000	No
100-B-5 Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,958	10,200	No	74,100	No
100-B-5 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	17	13	Yes	29	No
100-B-5 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,870	3,210	No	4,042	No
100-B-5 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.35	0.025	Yes	0.033	Yes
100-B-5 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	1.1	No	1.5	No
100-B-5 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.088	0.11	No	0.39	No
100-B-5 Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	1.1	No	1.2	No
100-B-8:1 Deep	non-Rad	Chromium	7440-47-3	ug/kg	55,800	18,500	Yes	320,000	No
100-B-8:1 Deep	non-Rad	Lead	7439-92-1	ug/kg	7,764	10,200	No	74,100	No
100-B-8:1 Deep	non-Rad	Mercury	7439-97-6	ug/kg	237	13	Yes	29	Yes
100-B-8:1 Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,774	3,210	No	4,042	No
100-B-8:1 Deep	Rad	Cesium-137	10045-97-3	pCi/g	9.6	1.1	Yes	1.6	Yes
100-B-8:1 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.16	0.0084	Yes	0.039	Yes
100-B-8:1 Deep	Rad	Europium-154	15585-10-1	pCi/g	0.16	0.033	Yes	0.079	Yes
100-B-8:1 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.75	0.025	Yes	0.033	Yes
100-B-8:1 Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	2.3	0.18	Yes	0.37	Yes
100-B-8:1 Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.66	1.1	No	1.5	No
100-B-8:1 Deep	Rad	Uranium-238	U-238	pCi/g	0.60	1.1	No	1.2	No
100-B-8:1 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	16,055	18,500	No	320,000	No
100-B-8:1 Shallow	non-Rad	Lead	7439-92-1	ug/kg	37,866	10,200	Yes	74,100	No
100-B-8:1 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	48	13	Yes	29	Yes
100-B-8:1 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,792	3,210	No	4,042	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-B-8:1 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.20	1.1	No	1.6	No
100-B-8:1 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.069	0.025	Yes	0.033	Yes
100-B-8:1 Shallow	Rad	Total beta radiostromium	SR-RAD	pCi/g	0.32	0.18	Yes	0.37	No
100-B-8:1 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	1.1	No	1.5	No
100-B-8:1 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.037	0.11	No	0.39	No
100-B-8:1 Shallow	Rad	Uranium-238	U-238	pCi/g	0.55	1.1	No	1.2	No
100-B-8:2 Deep	non-Rad	Chromium	7440-47-3	ug/kg	65,806	18,500	Yes	320,000	No
100-B-8:2 Deep	non-Rad	Lead	7439-92-1	ug/kg	4,278	10,200	No	74,100	No
100-B-8:2 Deep	non-Rad	Mercury	7439-97-6	ug/kg	145	13	Yes	29	Yes
100-B-8:2 Deep	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,590	3,210	No	4,042	No
100-B-8:2 Deep	Rad	Cesium-137	10045-97-3	pCi/g	13	1.1	Yes	1.6	Yes
100-B-8:2 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.56	0.0084	Yes	0.039	Yes
100-B-8:2 Deep	Rad	Europium-154	15585-10-1	pCi/g	0.99	0.033	Yes	0.079	Yes
100-B-8:2 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.76	0.025	Yes	0.033	Yes
100-B-8:2 Deep	Rad	Total beta radiostromium	SR-RAD	pCi/g	2.7	0.18	Yes	0.37	Yes
100-B-8:2 Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	1.1	No	1.5	No
100-B-8:2 Deep	Rad	Uranium-238	U-238	pCi/g	0.53	1.1	No	1.2	No
100-B-8:2 Shallow 1	non-Rad	Chromium	7440-47-3	ug/kg	16,449	18,500	No	320,000	No
100-B-8:2 Shallow 1	non-Rad	Lead	7439-92-1	ug/kg	5,532	10,200	No	74,100	No
100-B-8:2 Shallow 1	non-Rad	Mercury	7439-97-6	ug/kg	23	13	Yes	29	No
100-B-8:2 Shallow 1	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,664	3,210	No	4,042	No
100-B-8:2 Shallow 1	Rad	Cesium-137	10045-97-3	pCi/g	0.62	1.1	No	1.6	No
100-B-8:2 Shallow 1	Rad	Cobalt-60	10198-40-0	pCi/g	0.095	0.0084	Yes	0.039	Yes
100-B-8:2 Shallow 1	Rad	Europium-154	15585-10-1	pCi/g	0.38	0.033	Yes	0.079	Yes
100-B-8:2 Shallow 1	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.36	0.025	Yes	0.033	Yes
100-B-8:2 Shallow 1	Rad	Total beta radiostromium	SR-RAD	pCi/g	1.6	0.18	Yes	0.37	Yes
100-B-8:2 Shallow 1	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	1.1	No	1.5	No
100-B-8:2 Shallow 1	Rad	Uranium-238	U-238	pCi/g	0.56	1.1	No	1.2	No
100-B-8:2 Shallow 3	non-Rad	Chromium	7440-47-3	ug/kg	15,897	18,500	No	320,000	No
100-B-8:2 Shallow 3	non-Rad	Lead	7439-92-1	ug/kg	4,150	10,200	No	74,100	No
100-B-8:2 Shallow 3	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,729	3,210	No	4,042	No
100-B-8:2 Shallow 3	Rad	Cesium-137	10045-97-3	pCi/g	0.55	1.1	No	1.6	No
100-B-8:2 Shallow 3	Rad	Total beta radiostromium	SR-RAD	pCi/g	1.8	0.18	Yes	0.37	Yes
100-B-8:2 Shallow 3	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	1.1	No	1.5	No
100-B-8:2 Shallow 3	Rad	Uranium-238	U-238	pCi/g	0.58	1.1	No	1.2	No
100-C-3 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,500	20,000	No	27,700	No
100-C-3 Shallow	non-Rad	Barium	7440-39-3	ug/kg	62,500	132,000	No	480,000	No
100-C-3 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	278	563	No	2,980	No
100-C-3 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,500	18,500	No	320,000	No
100-C-3 Shallow	non-Rad	Lead	7439-92-1	ug/kg	10,000	10,200	No	74,100	No
100-C-3 Shallow	non-Rad	Selenium	7782-49-2	ug/kg	487	780	No	840	No
100-C-3 Shallow	non-Rad	Silver	7440-22-4	ug/kg	112	167	No	273	No
100-C-3 Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,084	3,210	No	4,042	No
100-C-3 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.15	1.1	No	1.6	No
100-C-3 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.71	1.1	No	1.5	No
100-C-3 Shallow	Rad	Uranium-238	U-238	pCi/g	0.70	1.1	No	1.2	No
100-C-7:1 Shallow 1	non-Rad	Aluminum	7429-90-5	ug/kg	8.10E+06	1.18E+07	No	2.88E+07	No
100-C-7:1 Shallow 1	non-Rad	Arsenic	7440-38-2	ug/kg	3,482	20,000	No	27,700	No
100-C-7:1 Shallow 1	non-Rad	Barium	7440-39-3	ug/kg	63,124	132,000	No	480,000	No
100-C-7:1 Shallow 1	non-Rad	Beryllium	7440-41-7	ug/kg	295	1,510	No	10,000	No
100-C-7:1 Shallow 1	non-Rad	Boron	7440-42-8	ug/kg	1,608	3,890	No	5,860	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-C-7:1 Shallow_1	non-Rad	Cadmium	7440-43-9	ug/kg	84	563	No	2,980	No
100-C-7:1 Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	8,876	18,500	No	320,000	No
100-C-7:1 Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	8,282	15,700	No	110,000	No
100-C-7:1 Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	15,632	22,000	No	61,000	No
100-C-7:1 Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	2.24E+07	3.26E+07	No	6.81E+07	No
100-C-7:1 Shallow_1	non-Rad	Lead	7439-92-1	ug/kg	5,004	10,200	No	74,100	No
100-C-7:1 Shallow_1	non-Rad	Manganese	7439-96-5	ug/kg	343,222	512,000	No	1.11E+06	No
100-C-7:1 Shallow_1	non-Rad	Mercury	7439-97-6	ug/kg	24	13	Yes	29	No
100-C-7:1 Shallow_1	non-Rad	Molybdenum	7439-98-7	ug/kg	373	470	No	3,170	No
100-C-7:1 Shallow_1	non-Rad	Nickel	7440-02-0	ug/kg	10,250	19,100	No	200,000	No
100-C-7:1 Shallow_1	non-Rad	Vanadium	7440-62-2	ug/kg	61,594	85,100	No	140,000	No
100-C-7:1 Shallow_1	non-Rad	Zinc	7440-66-6	ug/kg	44,300	67,800	No	366,000	No
100-C-7:1 Shallow_2	non-Rad	Aluminum	7429-90-5	ug/kg	4.54E+06	1.18E+07	No	2.88E+07	No
100-C-7:1 Shallow_2	non-Rad	Arsenic	7440-38-2	ug/kg	1,420	20,000	No	27,700	No
100-C-7:1 Shallow_2	non-Rad	Barium	7440-39-3	ug/kg	57,186	132,000	No	480,000	No
100-C-7:1 Shallow_2	non-Rad	Beryllium	7440-41-7	ug/kg	212	1,510	No	10,000	No
100-C-7:1 Shallow_2	non-Rad	Boron	7440-42-8	ug/kg	633	3,890	No	5,860	No
100-C-7:1 Shallow_2	non-Rad	Cadmium	7440-43-9	ug/kg	45	563	No	2,980	No
100-C-7:1 Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	3,298	18,500	No	320,000	No
100-C-7:1 Shallow_2	non-Rad	Cobalt	7440-48-4	ug/kg	7,114	15,700	No	110,000	No
100-C-7:1 Shallow_2	non-Rad	Copper	7440-50-8	ug/kg	12,752	22,000	No	61,000	No
100-C-7:1 Shallow_2	non-Rad	Iron	7439-89-6	ug/kg	2.03E+07	3.26E+07	No	6.81E+07	No
100-C-7:1 Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	1,807	10,200	No	74,100	No
100-C-7:1 Shallow_2	non-Rad	Manganese	7439-96-5	ug/kg	292,818	512,000	No	1.11E+06	No
100-C-7:1 Shallow_2	non-Rad	Molybdenum	7439-98-7	ug/kg	315	470	No	3,170	No
100-C-7:1 Shallow_2	non-Rad	Nickel	7440-02-0	ug/kg	5,395	19,100	No	200,000	No
100-C-7:1 Shallow_2	non-Rad	Vanadium	7440-62-2	ug/kg	55,467	85,100	No	140,000	No
100-C-7:1 Shallow_2	non-Rad	Zinc	7440-66-6	ug/kg	36,539	67,800	No	366,000	No
100-C-7:1 Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	7.89E+06	1.18E+07	No	2.88E+07	No
100-C-7:1 Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	2,617	20,000	No	27,700	No
100-C-7:1 Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	73,483	132,000	No	480,000	No
100-C-7:1 Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	298	1,510	No	10,000	No
100-C-7:1 Shallow_3	non-Rad	Boron	7440-42-8	ug/kg	1,770	3,890	No	5,860	No
100-C-7:1 Shallow_3	non-Rad	Cadmium	7440-43-9	ug/kg	152	563	No	2,980	No
100-C-7:1 Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	11,331	18,500	No	320,000	No
100-C-7:1 Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	9,644	15,700	No	110,000	No
100-C-7:1 Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	18,845	22,000	No	61,000	No
100-C-7:1 Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	2.84E+07	3.26E+07	No	6.81E+07	No
100-C-7:1 Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	4,032	10,200	No	74,100	No
100-C-7:1 Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	358,358	512,000	No	1.11E+06	No
100-C-7:1 Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	12	13	No	29	No
100-C-7:1 Shallow_3	non-Rad	Molybdenum	7439-98-7	ug/kg	645	470	Yes	3,170	No
100-C-7:1 Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	10,337	19,100	No	200,000	No
100-C-7:1 Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	81,618	85,100	No	140,000	No
100-C-7:1 Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	50,985	67,800	No	366,000	No
100-C-7 Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	7.17E+06	1.18E+07	No	2.88E+07	No
100-C-7 Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	3,692	20,000	No	27,700	No
100-C-7 Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	57,480	132,000	No	480,000	No
100-C-7 Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	288	1,510	No	10,000	No
100-C-7 Shallow_1	non-Rad	Boron	7440-42-8	ug/kg	1,157	3,890	No	5,860	No
100-C-7 Shallow_1	non-Rad	Cadmium	7440-43-9	ug/kg	92	563	No	2,980	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-C-7 Shallow 1	non-Rad	Chromium	7440-47-3	ug/kg	9,051	18,500	No	320,000	No
100-C-7 Shallow 1	non-Rad	Cobalt	7440-48-4	ug/kg	7,957	15,700	No	110,000	No
100-C-7 Shallow 1	non-Rad	Copper	7440-50-8	ug/kg	15,161	22,000	No	61,000	No
100-C-7 Shallow 1	non-Rad	Iron	7439-89-6	ug/kg	2.27E+07	3.26E+07	No	6.81E+07	No
100-C-7 Shallow 1	non-Rad	Lead	7439-92-1	ug/kg	6,444	10,200	No	74,100	No
100-C-7 Shallow 1	non-Rad	Manganese	7439-96-5	ug/kg	331,459	512,000	No	1.11E+06	No
100-C-7 Shallow 1	non-Rad	Mercury	7439-97-6	ug/kg	179	13	Yes	29	Yes
100-C-7 Shallow 1	non-Rad	Molybdenum	7439-98-7	ug/kg	447	470	No	3,170	No
100-C-7 Shallow 1	non-Rad	Nickel	7440-02-0	ug/kg	11,443	19,100	No	200,000	No
100-C-7 Shallow 1	non-Rad	Vanadium	7440-62-2	ug/kg	63,129	85,100	No	140,000	No
100-C-7 Shallow 1	non-Rad	Zinc	7440-66-6	ug/kg	46,026	67,800	No	366,000	No
100-C-7 Shallow 2	non-Rad	Aluminum	7429-90-5	ug/kg	3.74E+06	1.18E+07	No	2.88E+07	No
100-C-7 Shallow 2	non-Rad	Arsenic	7440-38-2	ug/kg	1,398	20,000	No	27,700	No
100-C-7 Shallow 2	non-Rad	Barium	7440-39-3	ug/kg	44,286	132,000	No	480,000	No
100-C-7 Shallow 2	non-Rad	Beryllium	7440-41-7	ug/kg	188	1,510	No	10,000	No
100-C-7 Shallow 2	non-Rad	Cadmium	7440-43-9	ug/kg	73	563	No	2,980	No
100-C-7 Shallow 2	non-Rad	Chromium	7440-47-3	ug/kg	2,573	18,500	No	320,000	No
100-C-7 Shallow 2	non-Rad	Cobalt	7440-48-4	ug/kg	7,736	15,700	No	110,000	No
100-C-7 Shallow 2	non-Rad	Copper	7440-50-8	ug/kg	14,385	22,000	No	61,000	No
100-C-7 Shallow 2	non-Rad	Iron	7439-89-6	ug/kg	2.23E+07	3.26E+07	No	6.81E+07	No
100-C-7 Shallow 2	non-Rad	Lead	7439-92-1	ug/kg	2,259	10,200	No	74,100	No
100-C-7 Shallow 2	non-Rad	Manganese	7439-96-5	ug/kg	264,954	512,000	No	1.11E+06	No
100-C-7 Shallow 2	non-Rad	Molybdenum	7439-98-7	ug/kg	328	470	No	3,170	No
100-C-7 Shallow 2	non-Rad	Nickel	7440-02-0	ug/kg	5,081	19,100	No	200,000	No
100-C-7 Shallow 2	non-Rad	Vanadium	7440-62-2	ug/kg	58,819	85,100	No	140,000	No
100-C-7 Shallow 2	non-Rad	Zinc	7440-66-6	ug/kg	37,568	67,800	No	366,000	No
100-C-9:1 Deep Focused	non-Rad	Aluminum	7429-90-5	ug/kg	3.88E+06	1.18E+07	No	2.88E+07	No
100-C-9:1 Deep Focused	non-Rad	Antimony	7440-36-0	ug/kg	430	130	Yes	385	Yes
100-C-9:1 Deep Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,700	20,000	No	27,700	No
100-C-9:1 Deep Focused	non-Rad	Barium	7440-39-3	ug/kg	46,000	132,000	No	480,000	No
100-C-9:1 Deep Focused	non-Rad	Beryllium	7440-41-7	ug/kg	1,800	1,510	Yes	10,000	No
100-C-9:1 Deep Focused	non-Rad	Boron	7440-42-8	ug/kg	2,900	3,890	No	5,860	No
100-C-9:1 Deep Focused	non-Rad	Cadmium	7440-43-9	ug/kg	60	563	No	2,980	No
100-C-9:1 Deep Focused	non-Rad	Chromium	7440-47-3	ug/kg	16,100	18,500	No	320,000	No
100-C-9:1 Deep Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,100	15,700	No	110,000	No
100-C-9:1 Deep Focused	non-Rad	Copper	7440-50-8	ug/kg	37,300	22,000	Yes	61,000	No
100-C-9:1 Deep Focused	non-Rad	Iron	7439-89-6	ug/kg	2.69E+07	3.26E+07	No	6.81E+07	No
100-C-9:1 Deep Focused	non-Rad	Lead	7439-92-1	ug/kg	15,300	10,200	Yes	74,100	No
100-C-9:1 Deep Focused	non-Rad	Lithium	7439-93-2	ug/kg	3,400	13,300	No	19,200	No
100-C-9:1 Deep Focused	non-Rad	Manganese	7439-96-5	ug/kg	311,000	512,000	No	1.11E+06	No
100-C-9:1 Deep Focused	non-Rad	Mercury	7439-97-6	ug/kg	2,900	13	Yes	29	Yes
100-C-9:1 Deep Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	620	470	Yes	3,170	No
100-C-9:1 Deep Focused	non-Rad	Nickel	7440-02-0	ug/kg	6,800	19,100	No	200,000	No
100-C-9:1 Deep Focused	non-Rad	Vanadium	7440-62-2	ug/kg	66,300	85,100	No	140,000	No
100-C-9:1 Deep Focused	non-Rad	Zinc	7440-66-6	ug/kg	47,600	67,800	No	366,000	No
100-C-9:1 Deep Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.15	1.1	No	1.6	No
100-C-9:1 Shallow 1	non-Rad	Antimony	7440-36-0	ug/kg	470	130	Yes	385	Yes
100-C-9:1 Shallow 1	non-Rad	Arsenic	7440-38-2	ug/kg	3,304	20,000	No	27,700	No
100-C-9:1 Shallow 1	non-Rad	Barium	7440-39-3	ug/kg	68,483	132,000	No	480,000	No
100-C-9:1 Shallow 1	non-Rad	Beryllium	7440-41-7	ug/kg	328	1,510	No	10,000	No
100-C-9:1 Shallow 1	non-Rad	Boron	7440-42-8	ug/kg	836	3,890	No	5,860	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-C-9:1 Shallow 1	non-Rad	Cadmium	7440-43-9	ug/kg	145	563	No	2,980	No
100-C-9:1 Shallow 1	non-Rad	Chromium	7440-47-3	ug/kg	8,505	18,500	No	320,000	No
100-C-9:1 Shallow 1	non-Rad	Cobalt	7440-48-4	ug/kg	8,098	15,700	No	110,000	No
100-C-9:1 Shallow 1	non-Rad	Copper	7440-50-8	ug/kg	16,720	22,000	No	61,000	No
100-C-9:1 Shallow 1	non-Rad	Lead	7439-92-1	ug/kg	4,050	10,200	No	74,100	No
100-C-9:1 Shallow 1	non-Rad	Manganese	7439-96-5	ug/kg	316,608	512,000	No	1.11E+06	No
100-C-9:1 Shallow 1	non-Rad	Mercury	7439-97-6	ug/kg	44	13	Yes	29	Yes
100-C-9:1 Shallow 1	non-Rad	Molybdenum	7439-98-7	ug/kg	424	470	No	3,170	No
100-C-9:1 Shallow 1	non-Rad	Nickel	7440-02-0	ug/kg	10,764	19,100	No	200,000	No
100-C-9:1 Shallow 1	non-Rad	Selenium	7782-49-2	ug/kg	474	780	No	840	No
100-C-9:1 Shallow 1	non-Rad	Silver	7440-22-4	ug/kg	81	167	No	273	No
100-C-9:1 Shallow 1	non-Rad	Vanadium	7440-62-2	ug/kg	46,252	85,100	No	140,000	No
100-C-9:1 Shallow 1	non-Rad	Zinc	7440-66-6	ug/kg	40,749	67,800	No	366,000	No
100-C-9:1 Shallow 2	non-Rad	Aluminum	7429-90-5	ug/kg	6.76E+06	1.18E+07	No	2.88E+07	No
100-C-9:1 Shallow 2	non-Rad	Antimony	7440-36-0	ug/kg	513	130	Yes	385	Yes
100-C-9:1 Shallow 2	non-Rad	Arsenic	7440-38-2	ug/kg	4,983	20,000	No	27,700	No
100-C-9:1 Shallow 2	non-Rad	Barium	7440-39-3	ug/kg	75,252	132,000	No	480,000	No
100-C-9:1 Shallow 2	non-Rad	Beryllium	7440-41-7	ug/kg	398	1,510	No	10,000	No
100-C-9:1 Shallow 2	non-Rad	Boron	7440-42-8	ug/kg	1,235	3,890	No	5,860	No
100-C-9:1 Shallow 2	non-Rad	Cadmium	7440-43-9	ug/kg	260	563	No	2,980	No
100-C-9:1 Shallow 2	non-Rad	Chromium	7440-47-3	ug/kg	16,359	18,500	No	320,000	No
100-C-9:1 Shallow 2	non-Rad	Cobalt	7440-48-4	ug/kg	9,787	15,700	No	110,000	No
100-C-9:1 Shallow 2	non-Rad	Copper	7440-50-8	ug/kg	18,114	22,000	No	61,000	No
100-C-9:1 Shallow 2	non-Rad	Iron	7439-89-6	ug/kg	2.35E+07	3.26E+07	No	6.81E+07	No
100-C-9:1 Shallow 2	non-Rad	Lead	7439-92-1	ug/kg	6,459	10,200	No	74,100	No
100-C-9:1 Shallow 2	non-Rad	Lithium	7439-93-2	ug/kg	8,109	13,300	No	19,200	No
100-C-9:1 Shallow 2	non-Rad	Manganese	7439-96-5	ug/kg	402,742	512,000	No	1.11E+06	No
100-C-9:1 Shallow 2	non-Rad	Mercury	7439-97-6	ug/kg	1,886	13	Yes	29	Yes
100-C-9:1 Shallow 2	non-Rad	Molybdenum	7439-98-7	ug/kg	367	470	No	3,170	No
100-C-9:1 Shallow 2	non-Rad	Nickel	7440-02-0	ug/kg	12,476	19,100	No	200,000	No
100-C-9:1 Shallow 2	non-Rad	Vanadium	7440-62-2	ug/kg	49,792	85,100	No	140,000	No
100-C-9:1 Shallow 2	non-Rad	Zinc	7440-66-6	ug/kg	48,244	67,800	No	366,000	No
100-C-9:1 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,200	20,000	No	27,700	No
100-C-9:1 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	162,000	132,000	Yes	480,000	No
100-C-9:1 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	340	563	No	2,980	No
100-C-9:1 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	17,300	18,500	No	320,000	No
100-C-9:1 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	4,900	10,200	No	74,100	No
100-C-9:1 Shallow Focused	non-Rad	Selenium	7782-49-2	ug/kg	430	780	No	840	No
100-C-9:2 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	5.49E+06	1.18E+07	No	2.88E+07	No
100-C-9:2 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,827	20,000	No	27,700	No
100-C-9:2 Shallow	non-Rad	Barium	7440-39-3	ug/kg	62,909	132,000	No	480,000	No
100-C-9:2 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	454	1,510	No	10,000	No
100-C-9:2 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	258	563	No	2,980	No
100-C-9:2 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	8,580	18,500	No	320,000	No
100-C-9:2 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	7,997	15,700	No	110,000	No
100-C-9:2 Shallow	non-Rad	Copper	7440-50-8	ug/kg	15,494	22,000	No	61,000	No
100-C-9:2 Shallow	non-Rad	Iron	7439-89-6	ug/kg	1.94E+07	3.26E+07	No	6.81E+07	No
100-C-9:2 Shallow	non-Rad	Lead	7439-92-1	ug/kg	13,131	10,200	Yes	74,100	No
100-C-9:2 Shallow	non-Rad	Lithium	7439-93-2	ug/kg	6,540	13,300	No	19,200	No
100-C-9:2 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	341,053	512,000	No	1.11E+06	No
100-C-9:2 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	40	13	Yes	29	Yes



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
100-C-9:2 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	418	470	No	3,170	No
100-C-9:2 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	10,637	19,100	No	200,000	No
100-C-9:2 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	46,900	85,100	No	140,000	No
100-C-9:2 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	263,884	67,800	Yes	366,000	No
100-C-9:2 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.13	1.1	No	1.6	No
100-C-9:2 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.30E+06	1.18E+07	No	2.88E+07	No
100-C-9:2 Shallow Focused	non-Rad	Antimony	7440-36-0	ug/kg	970	130	Yes	385	Yes
100-C-9:2 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,400	20,000	No	27,700	No
100-C-9:2 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	74,100	132,000	No	480,000	No
100-C-9:2 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	510	1,510	No	10,000	No
100-C-9:2 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	5,100	3,890	Yes	5,860	No
100-C-9:2 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	500	563	No	2,980	No
100-C-9:2 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	16,500	18,500	No	320,000	No
100-C-9:2 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,900	15,700	No	110,000	No
100-C-9:2 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	66,100	22,000	Yes	61,000	Yes
100-C-9:2 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	3.18E+07	3.26E+07	No	6.81E+07	No
100-C-9:2 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	152,000	10,200	Yes	74,100	Yes
100-C-9:2 Shallow Focused	non-Rad	Lithium	7439-93-2	ug/kg	7,200	13,300	No	19,200	No
100-C-9:2 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	456,000	512,000	No	1.11E+06	No
100-C-9:2 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	850	13	Yes	29	Yes
100-C-9:2 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	1,900	470	Yes	3,170	No
100-C-9:2 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	22,000	19,100	Yes	200,000	No
100-C-9:2 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	58,400	85,100	No	140,000	No
100-C-9:2 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	111,000	67,800	Yes	366,000	No
100-C-9:3 Deep Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.51E+06	1.18E+07	No	2.88E+07	No
100-C-9:3 Deep Focused	non-Rad	Antimony	7440-36-0	ug/kg	2,100	130	Yes	385	Yes
100-C-9:3 Deep Focused	non-Rad	Arsenic	7440-38-2	ug/kg	6,500	20,000	No	27,700	No
100-C-9:3 Deep Focused	non-Rad	Barium	7440-39-3	ug/kg	66,700	132,000	No	480,000	No
100-C-9:3 Deep Focused	non-Rad	Beryllium	7440-41-7	ug/kg	330	1,510	No	10,000	No
100-C-9:3 Deep Focused	non-Rad	Boron	7440-42-8	ug/kg	1,300	3,890	No	5,860	No
100-C-9:3 Deep Focused	non-Rad	Cadmium	7440-43-9	ug/kg	200	563	No	2,980	No
100-C-9:3 Deep Focused	non-Rad	Chromium	7440-47-3	ug/kg	12,800	18,500	No	320,000	No
100-C-9:3 Deep Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,200	15,700	No	110,000	No
100-C-9:3 Deep Focused	non-Rad	Copper	7440-50-8	ug/kg	19,600	22,000	No	61,000	No
100-C-9:3 Deep Focused	non-Rad	Iron	7439-89-6	ug/kg	2.55E+07	3.26E+07	No	6.81E+07	No
100-C-9:3 Deep Focused	non-Rad	Lead	7439-92-1	ug/kg	6,300	10,200	No	74,100	No
100-C-9:3 Deep Focused	non-Rad	Manganese	7439-96-5	ug/kg	412,000	512,000	No	1.11E+06	No
100-C-9:3 Deep Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	640	470	Yes	3,170	No
100-C-9:3 Deep Focused	non-Rad	Nickel	7440-02-0	ug/kg	14,500	19,100	No	200,000	No
100-C-9:3 Deep Focused	non-Rad	Silver	7440-22-4	ug/kg	140	167	No	273	No
100-C-9:3 Deep Focused	non-Rad	Vanadium	7440-62-2	ug/kg	63,900	85,100	No	140,000	No
100-C-9:3 Deep Focused	non-Rad	Zinc	7440-66-6	ug/kg	54,900	67,800	No	366,000	No
116-B-1 Deep	non-Rad	Chromium	7440-47-3	ug/kg	16,456	18,500	No	320,000	No
116-B-1 Deep	non-Rad	Lead	7439-92-1	ug/kg	4,795	10,200	No	74,100	No
116-B-1 Deep	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
116-B-1 Deep	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,834	3,210	No	4,042	No
116-B-1 Deep	Rad	Cesium-137	10045-97-3	pCi/g	3.1	1.1	Yes	1.6	Yes
116-B-1 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.17	0.0084	Yes	0.039	Yes
116-B-1 Deep	Rad	Europium-154	15585-10-1	pCi/g	0.36	0.033	Yes	0.079	Yes
116-B-1 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.22	0.025	Yes	0.033	Yes
116-B-1 Deep	Rad	Total beta radioisotopes	SR-RAD	pCi/g	1.4	0.18	Yes	0.37	Yes



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-B-1 Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.1	1.1	Yes	1.5	No
116-B-1 Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.045	0.11	No	0.39	No
116-B-1 Deep	Rad	Uranium-238	U-238	pCi/g	0.95	1.1	No	1.2	No
116-B-1 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	12,550	18,500	No	320,000	No
116-B-1 Shallow	non-Rad	Lead	7439-92-1	ug/kg	5,699	10,200	No	74,100	No
116-B-1 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	19	13	Yes	29	No
116-B-1 Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,247	3,210	No	4,042	No
116-B-1 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.19	1.1	No	1.6	No
116-B-1 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.11	0.0084	Yes	0.039	Yes
116-B-1 Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.18	0.033	Yes	0.079	Yes
116-B-1 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.031	0.025	Yes	0.033	No
116-B-1 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.72	1.1	No	1.5	No
116-B-1 Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	1.1	No	1.2	No
116-B-10 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	23,800	18,500	Yes	320,000	No
116-B-10 Shallow	non-Rad	Lead	7439-92-1	ug/kg	8,000	10,200	No	74,100	No
116-B-10 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	1,300	13	Yes	29	Yes
116-B-10 Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,122	3,210	No	4,042	No
116-B-10 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.034	1.1	No	1.6	No
116-B-10 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.080	0.0084	Yes	0.039	Yes
116-B-10 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.56	1.1	No	1.5	No
116-B-10 Shallow	Rad	Uranium-238	U-238	pCi/g	0.71	1.1	No	1.2	No
116-B-11 Deep	non-Rad	Chromium	7440-47-3	ug/kg	231,428	18,500	Yes	320,000	No
116-B-11 Deep	non-Rad	Lead	7439-92-1	ug/kg	11,745	10,200	Yes	74,100	No
116-B-11 Deep	non-Rad	Mercury	7439-97-6	ug/kg	5,251	13	Yes	29	Yes
116-B-11 Deep	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	4,297	3,210	Yes	4,042	Yes
116-B-11 Deep	Rad	Cesium-137	10045-97-3	pCi/g	122	1.1	Yes	1.6	Yes
116-B-11 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	40	0.0084	Yes	0.039	Yes
116-B-11 Deep	Rad	Europium-154	15585-10-1	pCi/g	42	0.033	Yes	0.079	Yes
116-B-11 Deep	Rad	Europium-155	14391-16-3	pCi/g	2.2	0.054	Yes	0.098	Yes
116-B-11 Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.76	0.0038	Yes	0.019	Yes
116-B-11 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	19	0.025	Yes	0.033	Yes
116-B-11 Deep	Rad	Total beta radiostromium	SR-RAD	pCi/g	4.8	0.18	Yes	0.37	Yes
116-B-11 Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.6	1.1	Yes	1.5	Yes
116-B-11 Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.069	0.11	No	0.39	No
116-B-11 Deep	Rad	Uranium-238	U-238	pCi/g	1.4	1.1	Yes	1.2	Yes
116-B-11 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	13,637	18,500	No	320,000	No
116-B-11 Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,063	10,200	No	74,100	No
116-B-11 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	121	13	Yes	29	Yes
116-B-11 Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	3,928	3,210	Yes	4,042	No
116-B-11 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.92	1.1	No	1.6	No
116-B-11 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.28	0.0084	Yes	0.039	Yes
116-B-11 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.069	0.025	Yes	0.033	Yes
116-B-11 Shallow	Rad	Total beta radiostromium	SR-RAD	pCi/g	0.34	0.18	Yes	0.37	No
116-B-11 Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.3	1.1	Yes	1.5	No
116-B-11 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.057	0.11	No	0.39	No
116-B-11 Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	1.1	Yes	1.2	Yes
116-B-12 Deep	non-Rad	Chromium	7440-47-3	ug/kg	10,800	18,500	No	320,000	No
116-B-12 Deep	non-Rad	Lead	7439-92-1	ug/kg	5,700	10,200	No	74,100	No
116-B-12 Deep	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,048	3,210	No	4,042	No
116-B-12 Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.019	1.1	No	1.6	No
116-B-12 Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.62	1.1	No	1.5	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-B-12 Deep	Rad	Uranium-238	U-238	pCi/g	0.69	1.1	No	1.2	No
116-B-12 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	9,900	18,500	No	320,000	No
116-B-12 Shallow	non-Rad	Lead	7439-92-1	ug/kg	5,600	10,200	No	74,100	No
116-B-12 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,884	3,210	No	4,042	No
116-B-12 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.034	1.1	No	1.6	No
116-B-12 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	1.1	No	1.5	No
116-B-12 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.024	0.11	No	0.39	No
116-B-12 Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	1.1	No	1.2	No
116-B-13 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	5,700	18,500	No	320,000	No
116-B-13 Shallow	non-Rad	Lead	7439-92-1	ug/kg	2,300	10,200	No	74,100	No
116-B-13 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
116-B-13 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,975	3,210	No	4,042	No
116-B-13 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.049	1.1	No	1.6	No
116-B-13 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.043	0.025	Yes	0.033	Yes
116-B-13 Shallow	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.41	0.18	Yes	0.37	Yes
116-B-13 Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.1	1.1	No	1.5	No
116-B-13 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.055	0.11	No	0.39	No
116-B-13 Shallow	Rad	Uranium-238	U-238	pCi/g	0.99	1.1	No	1.2	No
116-B-14 Deep	non-Rad	Aluminum	7429-90-5	ug/kg	7.92E+06	1.18E+07	No	2.88E+07	No
116-B-14 Deep	non-Rad	Antimony	7440-36-0	ug/kg	6,600	130	Yes	385	Yes
116-B-14 Deep	non-Rad	Barium	7440-39-3	ug/kg	93,800	132,000	No	480,000	No
116-B-14 Deep	non-Rad	Beryllium	7440-41-7	ug/kg	520	1,510	No	10,000	No
116-B-14 Deep	non-Rad	Chromium	7440-47-3	ug/kg	18,600	18,500	Yes	320,000	No
116-B-14 Deep	non-Rad	Cobalt	7440-48-4	ug/kg	8,600	15,700	No	110,000	No
116-B-14 Deep	non-Rad	Copper	7440-50-8	ug/kg	17,400	22,000	No	61,000	No
116-B-14 Deep	non-Rad	Iron	7439-89-6	ug/kg	1.93E+07	3.26E+07	No	6.81E+07	No
116-B-14 Deep	non-Rad	Lead	7439-92-1	ug/kg	5,300	10,200	No	74,100	No
116-B-14 Deep	non-Rad	Manganese	7439-96-5	ug/kg	307,000	512,000	No	1.11E+06	No
116-B-14 Deep	non-Rad	Mercury	7439-97-6	ug/kg	18	13	Yes	29	No
116-B-14 Deep	non-Rad	Nickel	7440-02-0	ug/kg	17,900	19,100	No	200,000	No
116-B-14 Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,095	3,210	No	4,042	No
116-B-14 Deep	non-Rad	Vanadium	7440-62-2	ug/kg	39,600	85,100	No	140,000	No
116-B-14 Deep	non-Rad	Zinc	7440-66-6	ug/kg	42,300	67,800	No	366,000	No
116-B-14 Deep	Rad	Cesium-137	10045-97-3	pCi/g	5.9	1.1	Yes	1.6	Yes
116-B-14 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.10	0.025	Yes	0.033	Yes
116-B-14 Deep	Rad	Total beta radiostromtium	SR-RAD	pCi/g	1.5	0.18	Yes	0.37	Yes
116-B-14 Deep	Rad	Uranium-234	13966-29-5	pCi/g	0.99	1.1	No	1.5	No
116-B-14 Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.063	0.11	No	0.39	No
116-B-14 Deep	Rad	Uranium-238	U-238	pCi/g	1.0	1.1	No	1.2	No
116-B-14 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	33,600	18,500	Yes	320,000	No
116-B-14 Shallow	non-Rad	Lead	7439-92-1	ug/kg	20,000	10,200	Yes	74,100	No
116-B-14 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	30	13	Yes	29	Yes
116-B-14 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,346	3,210	Yes	4,042	Yes
116-B-14 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.96	1.1	No	1.6	No
116-B-14 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.37	0.025	Yes	0.033	Yes
116-B-14 Shallow	Rad	Total beta radiostromtium	SR-RAD	pCi/g	1.6	0.18	Yes	0.37	Yes
116-B-14 Shallow	Rad	Uranium-234	13966-29-5	pCi/g	1.5	1.1	Yes	1.5	Yes
116-B-14 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.061	0.11	No	0.39	No
116-B-14 Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	1.1	Yes	1.2	Yes
116-B-15 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	6,800	20,000	No	27,700	No
116-B-15 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	89,000	132,000	No	480,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-B-15 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	14,400	18,500	No	320,000	No
116-B-15 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	9,300	10,200	No	74,100	No
116-B-15 Shallow Focused	non-Rad	Selenium	7782-49-2	ug/kg	500	780	No	840	No
116-B-15 Shallow Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,983	3,210	No	4,042	No
116-B-15 Shallow Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.67	1.1	No	1.5	No
116-B-15 Shallow Focused	Rad	Uranium-238	U-238	pCi/g	0.67	1.1	No	1.2	No
116-B-2 Deep	non-Rad	Chromium	7440-47-3	ug/kg	12,000	18,500	No	320,000	No
116-B-2 Deep	non-Rad	Lead	7439-92-1	ug/kg	6,600	10,200	No	74,100	No
116-B-2 Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,658	3,210	No	4,042	No
116-B-2 Deep	Rad	Cesium-137	10045-97-3	pCi/g	47	1.1	Yes	1.6	Yes
116-B-2 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.023	0.0084	Yes	0.039	No
116-B-2 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.59	0.025	Yes	0.033	Yes
116-B-2 Deep	Rad	Total beta radiostromtium	SR-RAD	pCi/g	7.2	0.18	Yes	0.37	Yes
116-B-2 Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.58	1.1	No	1.5	No
116-B-2 Deep	Rad	Uranium-238	U-238	pCi/g	0.56	1.1	No	1.2	No
116-B-2 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	11,300	18,500	No	320,000	No
116-B-2 Shallow	non-Rad	Lead	7439-92-1	ug/kg	8,100	10,200	No	74,100	No
116-B-2 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,482	3,210	No	4,042	No
116-B-2 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.2	1.1	Yes	1.6	No
116-B-2 Shallow	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.32	0.18	Yes	0.37	No
116-B-2 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.52	1.1	No	1.5	No
116-B-2 Shallow	Rad	Uranium-238	U-238	pCi/g	0.50	1.1	No	1.2	No
116-B-3 Deep	non-Rad	Chromium	7440-47-3	ug/kg	10,400	18,500	No	320,000	No
116-B-3 Deep	non-Rad	Lead	7439-92-1	ug/kg	5,900	10,200	No	74,100	No
116-B-3 Deep	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
116-B-3 Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,727	3,210	No	4,042	No
116-B-3 Deep	Rad	Cesium-137	10045-97-3	pCi/g	20	1.1	Yes	1.6	Yes
116-B-3 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.26	0.025	Yes	0.033	Yes
116-B-3 Deep	Rad	Total beta radiostromtium	SR-RAD	pCi/g	3.2	0.18	Yes	0.37	Yes
116-B-3 Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.56	1.1	No	1.5	No
116-B-3 Deep	Rad	Uranium-238	U-238	pCi/g	0.58	1.1	No	1.2	No
116-B-3 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	9,800	18,500	No	320,000	No
116-B-3 Shallow	non-Rad	Lead	7439-92-1	ug/kg	8,400	10,200	No	74,100	No
116-B-3 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	50	13	Yes	29	Yes
116-B-3 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,697	3,210	No	4,042	No
116-B-3 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.061	1.1	No	1.6	No
116-B-3 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.70	1.1	No	1.5	No
116-B-3 Shallow	Rad	Uranium-238	U-238	pCi/g	0.57	1.1	No	1.2	No
116-B-4 Deep	non-Rad	Aluminum	7429-90-5	ug/kg	7.62E+06	1.18E+07	No	2.88E+07	No
116-B-4 Deep	non-Rad	Antimony	7440-36-0	ug/kg	6,701	130	Yes	385	Yes
116-B-4 Deep	non-Rad	Arsenic	7440-38-2	ug/kg	3,600	20,000	No	27,700	No
116-B-4 Deep	non-Rad	Barium	7440-39-3	ug/kg	50,733	132,000	No	480,000	No
116-B-4 Deep	non-Rad	Beryllium	7440-41-7	ug/kg	459	1,510	No	10,000	No
116-B-4 Deep	non-Rad	Cadmium	7440-43-9	ug/kg	394	563	No	2,980	No
116-B-4 Deep	non-Rad	Chromium	7440-47-3	ug/kg	92,716	18,500	Yes	320,000	No
116-B-4 Deep	non-Rad	Cobalt	7440-48-4	ug/kg	8,845	15,700	No	110,000	No
116-B-4 Deep	non-Rad	Copper	7440-50-8	ug/kg	21,616	22,000	No	61,000	No
116-B-4 Deep	non-Rad	Iron	7439-89-6	ug/kg	2.30E+07	3.26E+07	No	6.81E+07	No
116-B-4 Deep	non-Rad	Lead	7439-92-1	ug/kg	94,296	10,200	Yes	74,100	Yes
116-B-4 Deep	non-Rad	Manganese	7439-96-5	ug/kg	206,278	512,000	No	1.11E+06	No
116-B-4 Deep	non-Rad	Mercury	7439-97-6	ug/kg	440	13	Yes	29	Yes



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-B-4_Deep	non-Rad	Nickel	7440-02-0	ug/kg	6,185	19,100	No	200,000	No
116-B-4_Deep	non-Rad	Silver	7440-22-4	ug/kg	720	167	Yes	273	Yes
116-B-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,643	3,210	No	4,042	No
116-B-4_Deep	non-Rad	Vanadium	7440-62-2	ug/kg	53,083	85,100	No	140,000	No
116-B-4_Deep	non-Rad	Zinc	7440-66-6	ug/kg	43,911	67,800	No	366,000	No
116-B-4_Deep	Rad	Cesium-137	10045-97-3	pCi/g	112	1.1	Yes	1.6	Yes
116-B-4_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	18	0.0084	Yes	0.039	Yes
116-B-4_Deep	Rad	Europium-154	15585-10-1	pCi/g	45	0.033	Yes	0.079	Yes
116-B-4_Deep	Rad	Europium-155	14391-16-3	pCi/g	1.3	0.054	Yes	0.098	Yes
116-B-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.51	1.1	No	1.5	No
116-B-4_Deep	Rad	Uranium-238	U-238	pCi/g	0.55	1.1	No	1.2	No
116-B-4_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	9,900	18,500	No	320,000	No
116-B-4_Shallow	non-Rad	Lead	7439-92-1	ug/kg	5,800	10,200	No	74,100	No
116-B-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,881	3,210	No	4,042	No
116-B-4_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.049	1.1	No	1.6	No
116-B-4_Shallow	Rad	Plutonium-238	13981-16-3	pCi/g	0.37	0.0038	Yes	0.019	Yes
116-B-4_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.35	0.025	Yes	0.033	Yes
116-B-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	1.1	No	1.5	No
116-B-4_Shallow	Rad	Uranium-238	U-238	pCi/g	0.63	1.1	No	1.2	No
116-B-5_Deep_Focused	non-Rad	Mercury	7439-97-6	ug/kg	2,800	13	Yes	29	Yes
116-B-5_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.29	1.1	No	1.6	No
116-B-5_Deep_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	0.94	0.0084	Yes	0.039	Yes
116-B-5_Deep_Focused	Rad	Europium-154	15585-10-1	pCi/g	0.88	0.033	Yes	0.079	Yes
116-B-5_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	300,000	132,000	Yes	480,000	No
116-B-5_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	16,000	13	Yes	29	Yes
116-B-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	1.1	Yes	1.6	Yes
116-B-5_Shallow_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	1.0	0.0084	Yes	0.039	Yes
116-B-5_Shallow_Focused	Rad	Europium-154	15585-10-1	pCi/g	0.67	0.033	Yes	0.079	Yes
116-B-6A_Deep	non-Rad	Chromium	7440-47-3	ug/kg	7,100	18,500	No	320,000	No
116-B-6A_Deep	non-Rad	Lead	7439-92-1	ug/kg	5,900	10,200	No	74,100	No
116-B-6A_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,735	3,210	No	4,042	No
116-B-6A_Deep	Rad	Cesium-137	10045-97-3	pCi/g	2.0	1.1	Yes	1.6	Yes
116-B-6A_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	2.8	0.025	Yes	0.033	Yes
116-B-6A_Deep	Rad	Total beta radiostromium	SR-RAD	pCi/g	21	0.18	Yes	0.37	Yes
116-B-6A_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.55	1.1	No	1.5	No
116-B-6A_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.042	0.11	No	0.39	No
116-B-6A_Deep	Rad	Uranium-238	U-238	pCi/g	0.58	1.1	No	1.2	No
116-B-6A_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,700	18,500	No	320,000	No
116-B-6A_Shallow	non-Rad	Lead	7439-92-1	ug/kg	11,100	10,200	Yes	74,100	No
116-B-6A_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
116-B-6A_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,779	3,210	No	4,042	No
116-B-6A_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	6.4	1.1	Yes	1.6	Yes
116-B-6A_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.23	0.025	Yes	0.033	Yes
116-B-6A_Shallow	Rad	Total beta radiostromium	SR-RAD	pCi/g	3.3	0.18	Yes	0.37	Yes
116-B-6A_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	1.1	Yes	1.5	No
116-B-6A_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.28	0.11	Yes	0.39	No
116-B-6A_Shallow	Rad	Uranium-238	U-238	pCi/g	0.55	1.1	No	1.2	No
116-B-6B_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	9,500	18,500	No	320,000	No
116-B-6B_Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,900	10,200	No	74,100	No
116-B-6B_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	40	13	Yes	29	Yes
116-B-6B_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,917	3,210	No	4,042	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-B-6B_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.030	1.1	No	1.6	No
116-B-6B_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	1.1	No	1.5	No
116-B-6B_Shallow	Rad	Uranium-238	U-238	pCi/g	0.64	1.1	No	1.2	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Chromium	7440-47-3	ug/kg	25,200	18,500	Yes	320,000	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Lead	7439-92-1	ug/kg	8,800	10,200	No	74,100	No
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Mercury	7439-97-6	ug/kg	750	13	Yes	29	Yes
116-B-7, 132-B-6, 132-C-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,525	3,210	No	4,042	No
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	3.5	1.1	Yes	1.6	Yes
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	0.18	0.0084	Yes	0.039	Yes
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.40	0.18	Yes	0.37	Yes
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.93	1.1	No	1.5	No
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.053	0.11	No	0.39	No
116-B-7, 132-B-6, 132-C-2_Deep	Rad	Uranium-238	U-238	pCi/g	0.84	1.1	No	1.2	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	19,087	18,500	Yes	320,000	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,194	10,200	No	74,100	No
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	63	13	Yes	29	Yes
116-B-7, 132-B-6, 132-C-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,072	3,210	No	4,042	No
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.34	1.1	No	1.6	No
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.25	0.0084	Yes	0.039	Yes
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.22	0.033	Yes	0.079	Yes
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.75	1.1	No	1.5	No
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.050	0.11	No	0.39	No
116-B-7, 132-B-6, 132-C-2_Shallow	Rad	Uranium-238	U-238	pCi/g	0.69	1.1	No	1.2	No
116-B-9_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	13,200	18,500	No	320,000	No
116-B-9_Shallow	non-Rad	Lead	7439-92-1	ug/kg	12,000	10,200	Yes	74,100	No
116-B-9_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	390	13	Yes	29	Yes
116-B-9_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,372	3,210	No	4,042	No
116-B-9_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.44	1.1	No	1.5	No
116-B-9_Shallow	Rad	Uranium-238	U-238	pCi/g	0.46	1.1	No	1.2	No
116-C-1_Deep	non-Rad	Chromium	7440-47-3	ug/kg	66,667	18,500	Yes	320,000	No
116-C-1_Deep	non-Rad	Lead	7439-92-1	ug/kg	21,737	10,200	Yes	74,100	No
116-C-1_Deep	non-Rad	Mercury	7439-97-6	ug/kg	2,275	13	Yes	29	Yes
116-C-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	34,266	3,210	Yes	4,042	Yes
116-C-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1,484	1.1	Yes	1.6	Yes
116-C-1_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	62	0.0084	Yes	0.039	Yes
116-C-1_Deep	Rad	Europium-154	15585-10-1	pCi/g	28	0.033	Yes	0.079	Yes
116-C-1_Deep	Rad	Europium-155	14391-16-3	pCi/g	1.6	0.054	Yes	0.098	Yes
116-C-1_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.94	0.0038	Yes	0.019	Yes
116-C-1_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	46	0.025	Yes	0.033	Yes
116-C-1_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	64	0.18	Yes	0.37	Yes
116-C-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.55	1.1	No	1.5	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-C-1_Deep	Rad	Uranium-234	13966-29-5	pCi/g	5.1	1.1	Yes	1.5	Yes
116-C-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.063	0.11	No	0.39	No
116-C-1_Deep	Rad	Uranium-238	U-238	pCi/g	6.1	1.1	Yes	1.2	Yes
116-C-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	9.69E+06	1.18E+07	No	2.88E+07	No
116-C-1_Deep_Focused	non-Rad	Antimony	7440-36-0	ug/kg	2,600	130	Yes	385	Yes
116-C-1_Deep_Focused	non-Rad	Barium	7440-39-3	ug/kg	77,800	132,000	No	480,000	No
116-C-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	530	1,510	No	10,000	No
116-C-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	2,900	563	Yes	2,980	No
116-C-1_Deep_Focused	non-Rad	Chromium	7440-47-3	ug/kg	148,000	18,500	Yes	320,000	No
116-C-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,000	15,700	No	110,000	No
116-C-1_Deep_Focused	non-Rad	Copper	7440-50-8	ug/kg	30,400	22,000	Yes	61,000	No
116-C-1_Deep_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.31E+07	3.26E+07	No	6.81E+07	No
116-C-1_Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	48,500	10,200	Yes	74,100	No
116-C-1_Deep_Focused	non-Rad	Manganese	7439-96-5	ug/kg	296,000	512,000	No	1.11E+06	No
116-C-1_Deep_Focused	non-Rad	Mercury	7439-97-6	ug/kg	11,800	13	Yes	29	Yes
116-C-1_Deep_Focused	non-Rad	Nickel	7440-02-0	ug/kg	18,600	19,100	No	200,000	No
116-C-1_Deep_Focused	non-Rad	Silver	7440-22-4	ug/kg	890	167	Yes	273	Yes
116-C-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,977	3,210	No	4,042	No
116-C-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	38,600	85,100	No	140,000	No
116-C-1_Deep_Focused	non-Rad	Zinc	7440-66-6	ug/kg	464,000	67,800	Yes	366,000	Yes
116-C-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	5,690	1.1	Yes	1.6	Yes
116-C-1_Deep_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	115	0.0084	Yes	0.039	Yes
116-C-1_Deep_Focused	Rad	Europium-154	15585-10-1	pCi/g	144	0.033	Yes	0.079	Yes
116-C-1_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	4.0	0.0038	Yes	0.019	Yes
116-C-1_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	136	0.025	Yes	0.033	Yes
116-C-1_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	88	0.18	Yes	0.37	Yes
116-C-1_Deep_Focused	Rad	Uranium-234	13966-29-5	pCi/g	0.19	1.1	No	1.5	No
116-C-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	1.0	1.1	No	1.2	No
116-C-1_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	12,664	18,500	No	320,000	No
116-C-1_Shallow	non-Rad	Lead	7439-92-1	ug/kg	4,420	10,200	No	74,100	No
116-C-1_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	30	13	Yes	29	Yes
116-C-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,357	3,210	No	4,042	No
116-C-1_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.83	1.1	No	1.6	No
116-C-1_Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.074	0.0084	Yes	0.039	Yes
116-C-1_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.22	0.025	Yes	0.033	Yes
116-C-1_Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.20	0.18	Yes	0.37	No
116-C-1_Shallow	Rad	Uranium-234	13966-29-5	pCi/g	0.82	1.1	No	1.5	No
116-C-1_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.045	0.11	No	0.39	No
116-C-1_Shallow	Rad	Uranium-238	U-238	pCi/g	0.79	1.1	No	1.2	No
116-C-2A_Deep	non-Rad	Chromium	7440-47-3	ug/kg	29,500	18,500	Yes	320,000	No
116-C-2A_Deep	non-Rad	Lead	7439-92-1	ug/kg	14,000	10,200	Yes	74,100	No
116-C-2A_Deep	non-Rad	Mercury	7439-97-6	ug/kg	150	13	Yes	29	Yes
116-C-2A_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,428	3,210	No	4,042	No
116-C-2A_Deep	Rad	Cesium-137	10045-97-3	pCi/g	23	1.1	Yes	1.6	Yes
116-C-2A_Deep	Rad	Cobalt-60	10198-40-0	pCi/g	12	0.0084	Yes	0.039	Yes
116-C-2A_Deep	Rad	Europium-154	15585-10-1	pCi/g	3.3	0.033	Yes	0.079	Yes
116-C-2A_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.15	0.0038	Yes	0.019	Yes
116-C-2A_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	1.5	0.025	Yes	0.033	Yes
116-C-2A_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	6.2	0.18	Yes	0.37	Yes
116-C-2A_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	0.45	1.1	No	1.5	No
116-C-2A_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.036	0.11	No	0.39	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-C-2A Deep	Rad	Uranium-238	U-238	pCi/g	0.48	1.1	No	1.2	No
116-C-2A Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,262	18,500	No	320,000	No
116-C-2A Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,600	10,200	No	74,100	No
116-C-2A Shallow	non-Rad	Mercury	7439-97-6	ug/kg	120	13	Yes	29	Yes
116-C-2A Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,378	3,210	No	4,042	No
116-C-2A Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.43	1.1	No	1.6	No
116-C-2A Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.23	0.0084	Yes	0.039	Yes
116-C-2A Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.10	0.025	Yes	0.033	Yes
116-C-2A Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	1.9	0.18	Yes	0.37	Yes
116-C-2A Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.50	1.1	No	1.5	No
116-C-2A Shallow	Rad	Uranium-238	U-238	pCi/g	0.46	1.1	No	1.2	No
116-C-3 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	9.19E+06	1.18E+07	No	2.88E+07	No
116-C-3 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	1,080	130	Yes	385	Yes
116-C-3 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	5,112	20,000	No	27,700	No
116-C-3 Shallow	non-Rad	Barium	7440-39-3	ug/kg	106,052	132,000	No	480,000	No
116-C-3 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	725	1,510	No	10,000	No
116-C-3 Shallow	non-Rad	Boron	7440-42-8	ug/kg	7,239	3,890	Yes	5,860	Yes
116-C-3 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	204	563	No	2,980	No
116-C-3 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	15,457	18,500	No	320,000	No
116-C-3 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	7,387	15,700	No	110,000	No
116-C-3 Shallow	non-Rad	Copper	7440-50-8	ug/kg	15,592	22,000	No	61,000	No
116-C-3 Shallow	non-Rad	Iron	7439-89-6	ug/kg	1.92E+07	3.26E+07	No	6.81E+07	No
116-C-3 Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,129	10,200	No	74,100	No
116-C-3 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	321,076	512,000	No	1.11E+06	No
116-C-3 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	15,662	19,100	No	200,000	No
116-C-3 Shallow	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,278	3,210	No	4,042	No
116-C-3 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	38,808	85,100	No	140,000	No
116-C-3 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	48,655	67,800	No	366,000	No
116-C-3 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.86	1.1	No	1.6	No
116-C-3 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.15	0.025	Yes	0.033	Yes
116-C-3 Shallow	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.64	0.18	Yes	0.37	Yes
116-C-3 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.80	1.1	No	1.5	No
116-C-3 Shallow	Rad	Uranium-238	U-238	pCi/g	0.77	1.1	No	1.2	No
116-C-3 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.15E+07	1.18E+07	No	2.88E+07	No
116-C-3 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	6,400	20,000	No	27,700	No
116-C-3 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	196,000	132,000	Yes	480,000	No
116-C-3 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	710	1,510	No	10,000	No
116-C-3 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	24,300	3,890	Yes	5,860	Yes
116-C-3 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	360	563	No	2,980	No
116-C-3 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	26,400	18,500	Yes	320,000	No
116-C-3 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	7,700	15,700	No	110,000	No
116-C-3 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	20,400	22,000	No	61,000	No
116-C-3 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	1.99E+07	3.26E+07	No	6.81E+07	No
116-C-3 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	9,100	10,200	No	74,100	No
116-C-3 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	346,000	512,000	No	1.11E+06	No
116-C-3 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	1,100	470	Yes	3,170	No
116-C-3 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	18,200	19,100	No	200,000	No
116-C-3 Shallow Focused	non-Rad	Nitrate	14797-55-8	ug/kg	12,400	52,000	No	906,000	No
116-C-3 Shallow Focused	non-Rad	Silver	7440-22-4	ug/kg	270	167	Yes	273	No
116-C-3 Shallow Focused	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,560	3,210	No	4,042	No
116-C-3 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	42,400	85,100	No	140,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
116-C-3 Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	51,400	67,800	No	366,000	No
116-C-3 Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	14	1.1	Yes	1.6	Yes
116-C-3 Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.91	0.025	Yes	0.033	Yes
116-C-3 Shallow_Focused	Rad	Total beta radiostromtium	SR-RAD	pCi/g	18	0.18	Yes	0.37	Yes
116-C-3 Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.90	1.1	No	1.5	No
116-C-3 Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.042	0.11	No	0.39	No
116-C-3 Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.86	1.1	No	1.2	No
116-C-5 Deep	non-Rad	Chromium	7440-47-3	ug/kg	41,332	18,500	Yes	320,000	No
116-C-5 Deep	non-Rad	Lead	7439-92-1	ug/kg	20,715	10,200	Yes	74,100	No
116-C-5 Deep	non-Rad	Mercury	7439-97-6	ug/kg	2,436	13	Yes	29	Yes
116-C-5 Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,838	3,210	No	4,042	No
116-C-5 Deep	Rad	Cesium-137	10045-97-3	pCi/g	52	1.1	Yes	1.6	Yes
116-C-5 Deep	Rad	Cobalt-60	10198-40-0	pCi/g	18	0.0084	Yes	0.039	Yes
116-C-5 Deep	Rad	Europium-154	15585-10-1	pCi/g	16	0.033	Yes	0.079	Yes
116-C-5 Deep	Rad	Europium-155	14391-16-3	pCi/g	0.48	0.054	Yes	0.098	Yes
116-C-5 Deep	Rad	Plutonium-238	13981-16-3	pCi/g	0.14	0.0038	Yes	0.019	Yes
116-C-5 Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	4.6	0.025	Yes	0.033	Yes
116-C-5 Deep	Rad	Total beta radiostromtium	SR-RAD	pCi/g	4.4	0.18	Yes	0.37	Yes
116-C-5 Deep	Rad	Uranium-234	13966-29-5	pCi/g	1.0	1.1	No	1.5	No
116-C-5 Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.048	0.11	No	0.39	No
116-C-5 Deep	Rad	Uranium-238	U-238	pCi/g	0.95	1.1	No	1.2	No
116-C-5 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	12,609	18,500	No	320,000	No
116-C-5 Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,017	10,200	No	74,100	No
116-C-5 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	32	13	Yes	29	Yes
116-C-5 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,773	3,210	No	4,042	No
116-C-5 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	1.2	1.1	Yes	1.6	No
116-C-5 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.15	0.0084	Yes	0.039	Yes
116-C-5 Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.32	0.033	Yes	0.079	Yes
116-C-5 Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.20	0.025	Yes	0.033	Yes
116-C-5 Shallow	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.39	0.18	Yes	0.37	Yes
116-C-5 Shallow	Rad	Uranium-234	13966-29-5	pCi/g	0.84	1.1	No	1.5	No
116-C-5 Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.039	0.11	No	0.39	No
116-C-5 Shallow	Rad	Uranium-238	U-238	pCi/g	0.93	1.1	No	1.2	No
116-C-6 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,400	20,000	No	27,700	No
116-C-6 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	44,700	132,000	No	480,000	No
116-C-6 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	6,700	18,500	No	320,000	No
116-C-6 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	4,300	10,200	No	74,100	No
116-C-6 Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,557	3,210	No	4,042	No
116-C-6 Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.9	1.1	Yes	1.6	Yes
116-C-6 Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.53	0.025	Yes	0.033	Yes
116-C-6 Shallow_Focused	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.46	0.18	Yes	0.37	Yes
116-C-6 Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	1.1	No	1.5	No
116-C-6 Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.041	0.11	No	0.39	No
116-C-6 Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.52	1.1	No	1.2	No
118-B-1 Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	6.60E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	3,100	20,000	No	27,700	No
118-B-1 Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	63,100	132,000	No	480,000	No
118-B-1 Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	660	1,510	No	10,000	No
118-B-1 Shallow_1	non-Rad	Boron	7440-42-8	ug/kg	1,900	3,890	No	5,860	No
118-B-1 Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	8,200	18,500	No	320,000	No
118-B-1 Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	10,700	15,700	No	110,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-B-1 Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	17,900	22,000	No	61,000	No
118-B-1 Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	2.41E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow_1	non-Rad	Lead	7439-92-1	ug/kg	4,900	10,200	No	74,100	No
118-B-1 Shallow_1	non-Rad	Manganese	7439-96-5	ug/kg	411,000	512,000	No	1.11E+06	No
118-B-1 Shallow_1	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
118-B-1 Shallow_1	non-Rad	Nickel	7440-02-0	ug/kg	12,900	19,100	No	200,000	No
118-B-1 Shallow_1	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,703	3,210	No	4,042	No
118-B-1 Shallow_1	non-Rad	Vanadium	7440-62-2	ug/kg	51,900	85,100	No	140,000	No
118-B-1 Shallow_1	non-Rad	Zinc	7440-66-6	ug/kg	49,100	67,800	No	366,000	No
118-B-1 Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.31	1.1	No	1.6	No
118-B-1 Shallow_1	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.28	0.18	Yes	0.37	No
118-B-1 Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	1.1	No	1.5	No
118-B-1 Shallow_1	Rad	Uranium-238	U-238	pCi/g	0.57	1.1	No	1.2	No
118-B-1 Shallow_2	non-Rad	Aluminum	7429-90-5	ug/kg	5.17E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_2	non-Rad	Arsenic	7440-38-2	ug/kg	3,200	20,000	No	27,700	No
118-B-1 Shallow_2	non-Rad	Barium	7440-39-3	ug/kg	61,000	132,000	No	480,000	No
118-B-1 Shallow_2	non-Rad	Beryllium	7440-41-7	ug/kg	650	1,510	No	10,000	No
118-B-1 Shallow_2	non-Rad	Boron	7440-42-8	ug/kg	5,500	3,890	Yes	5,860	No
118-B-1 Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	6,900	18,500	No	320,000	No
118-B-1 Shallow_2	non-Rad	Cobalt	7440-48-4	ug/kg	8,400	15,700	No	110,000	No
118-B-1 Shallow_2	non-Rad	Copper	7440-50-8	ug/kg	16,800	22,000	No	61,000	No
118-B-1 Shallow_2	non-Rad	Iron	7439-89-6	ug/kg	2.18E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	5,000	10,200	No	74,100	No
118-B-1 Shallow_2	non-Rad	Manganese	7439-96-5	ug/kg	329,000	512,000	No	1.11E+06	No
118-B-1 Shallow_2	non-Rad	Nickel	7440-02-0	ug/kg	11,000	19,100	No	200,000	No
118-B-1 Shallow_2	non-Rad	Vanadium	7440-62-2	ug/kg	54,700	85,100	No	140,000	No
118-B-1 Shallow_2	non-Rad	Zinc	7440-66-6	ug/kg	43,300	67,800	No	366,000	No
118-B-1 Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.22	1.1	No	1.6	No
118-B-1 Shallow_2	Rad	Total beta radiostromtium	SR-RAD	pCi/g	0.25	0.18	Yes	0.37	No
118-B-1 Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	6.12E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	4,500	20,000	No	27,700	No
118-B-1 Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	65,900	132,000	No	480,000	No
118-B-1 Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	650	1,510	No	10,000	No
118-B-1 Shallow_3	non-Rad	Boron	7440-42-8	ug/kg	8,900	3,890	Yes	5,860	Yes
118-B-1 Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	9,200	18,500	No	320,000	No
118-B-1 Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	9,100	15,700	No	110,000	No
118-B-1 Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	18,000	22,000	No	61,000	No
118-B-1 Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	2.21E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	6,600	10,200	No	74,100	No
118-B-1 Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	390,000	512,000	No	1.11E+06	No
118-B-1 Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	300	13	Yes	29	Yes
118-B-1 Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	19,000	19,100	No	200,000	No
118-B-1 Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	49,200	85,100	No	140,000	No
118-B-1 Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	44,300	67,800	No	366,000	No
118-B-1 Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	1.5	1.1	Yes	1.6	No
118-B-1 Shallow_3	Rad	Total beta radiostromtium	SR-RAD	pCi/g	4.4	0.18	Yes	0.37	Yes
118-B-1 Shallow_4	non-Rad	Aluminum	7429-90-5	ug/kg	5.27E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_4	non-Rad	Arsenic	7440-38-2	ug/kg	3,900	20,000	No	27,700	No
118-B-1 Shallow_4	non-Rad	Barium	7440-39-3	ug/kg	51,400	132,000	No	480,000	No
118-B-1 Shallow_4	non-Rad	Beryllium	7440-41-7	ug/kg	420	1,510	No	10,000	No
118-B-1 Shallow_4	non-Rad	Boron	7440-42-8	ug/kg	3,900	3,890	Yes	5,860	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-B-1 Shallow_4	non-Rad	Chromium	7440-47-3	ug/kg	6,700	18,500	No	320,000	No
118-B-1 Shallow_4	non-Rad	Cobalt	7440-48-4	ug/kg	8,600	15,700	No	110,000	No
118-B-1 Shallow_4	non-Rad	Copper	7440-50-8	ug/kg	16,500	22,000	No	61,000	No
118-B-1 Shallow_4	non-Rad	Iron	7439-89-6	ug/kg	2.23E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow_4	non-Rad	Lead	7439-92-1	ug/kg	5,500	10,200	No	74,100	No
118-B-1 Shallow_4	non-Rad	Manganese	7439-96-5	ug/kg	336,000	512,000	No	1.11E+06	No
118-B-1 Shallow_4	non-Rad	Nickel	7440-02-0	ug/kg	11,300	19,100	No	200,000	No
118-B-1 Shallow_4	non-Rad	Vanadium	7440-62-2	ug/kg	53,400	85,100	No	140,000	No
118-B-1 Shallow_4	non-Rad	Zinc	7440-66-6	ug/kg	42,400	67,800	No	366,000	No
118-B-1 Shallow_4	Rad	Cesium-137	10045-97-3	pCi/g	0.74	1.1	No	1.6	No
118-B-1 Shallow_5	non-Rad	Aluminum	7429-90-5	ug/kg	3.99E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_5	non-Rad	Arsenic	7440-38-2	ug/kg	2,900	20,000	No	27,700	No
118-B-1 Shallow_5	non-Rad	Barium	7440-39-3	ug/kg	44,400	132,000	No	480,000	No
118-B-1 Shallow_5	non-Rad	Beryllium	7440-41-7	ug/kg	140	1,510	No	10,000	No
118-B-1 Shallow_5	non-Rad	Boron	7440-42-8	ug/kg	1,200	3,890	No	5,860	No
118-B-1 Shallow_5	non-Rad	Cadmium	7440-43-9	ug/kg	230	563	No	2,980	No
118-B-1 Shallow_5	non-Rad	Chromium	7440-47-3	ug/kg	5,000	18,500	No	320,000	No
118-B-1 Shallow_5	non-Rad	Cobalt	7440-48-4	ug/kg	6,900	15,700	No	110,000	No
118-B-1 Shallow_5	non-Rad	Copper	7440-50-8	ug/kg	14,300	22,000	No	61,000	No
118-B-1 Shallow_5	non-Rad	Iron	7439-89-6	ug/kg	1.67E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow_5	non-Rad	Lead	7439-92-1	ug/kg	4,200	10,200	No	74,100	No
118-B-1 Shallow_5	non-Rad	Manganese	7439-96-5	ug/kg	302,000	512,000	No	1.11E+06	No
118-B-1 Shallow_5	non-Rad	Mercury	7439-97-6	ug/kg	40	13	Yes	29	Yes
118-B-1 Shallow_5	non-Rad	Nickel	7440-02-0	ug/kg	7,400	19,100	No	200,000	No
118-B-1 Shallow_5	non-Rad	Vanadium	7440-62-2	ug/kg	34,700	85,100	No	140,000	No
118-B-1 Shallow_5	non-Rad	Zinc	7440-66-6	ug/kg	38,600	67,800	No	366,000	No
118-B-1 Shallow_5	Rad	Cesium-137	10045-97-3	pCi/g	3.6	1.1	Yes	1.6	Yes
118-B-1 Shallow_5	Rad	Total beta radiostromtrium	SR-RAD	pCi/g	2.4	0.18	Yes	0.37	Yes
118-B-1 Shallow_6	non-Rad	Aluminum	7429-90-5	ug/kg	5.27E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_6	non-Rad	Arsenic	7440-38-2	ug/kg	4,500	20,000	No	27,700	No
118-B-1 Shallow_6	non-Rad	Barium	7440-39-3	ug/kg	96,400	132,000	No	480,000	No
118-B-1 Shallow_6	non-Rad	Beryllium	7440-41-7	ug/kg	360	1,510	No	10,000	No
118-B-1 Shallow_6	non-Rad	Boron	7440-42-8	ug/kg	8,800	3,890	Yes	5,860	Yes
118-B-1 Shallow_6	non-Rad	Chromium	7440-47-3	ug/kg	7,400	18,500	No	320,000	No
118-B-1 Shallow_6	non-Rad	Cobalt	7440-48-4	ug/kg	8,500	15,700	No	110,000	No
118-B-1 Shallow_6	non-Rad	Copper	7440-50-8	ug/kg	16,900	22,000	No	61,000	No
118-B-1 Shallow_6	non-Rad	Iron	7439-89-6	ug/kg	2.21E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow_6	non-Rad	Lead	7439-92-1	ug/kg	5,100	10,200	No	74,100	No
118-B-1 Shallow_6	non-Rad	Manganese	7439-96-5	ug/kg	322,000	512,000	No	1.11E+06	No
118-B-1 Shallow_6	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
118-B-1 Shallow_6	non-Rad	Nickel	7440-02-0	ug/kg	11,500	19,100	No	200,000	No
118-B-1 Shallow_6	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,250	3,210	No	4,042	No
118-B-1 Shallow_6	non-Rad	Vanadium	7440-62-2	ug/kg	49,100	85,100	No	140,000	No
118-B-1 Shallow_6	non-Rad	Zinc	7440-66-6	ug/kg	41,200	67,800	No	366,000	No
118-B-1 Shallow_6	Rad	Cesium-137	10045-97-3	pCi/g	0.16	1.1	No	1.6	No
118-B-1 Shallow_6	Rad	Uranium-233/234	U-233/234	pCi/g	0.61	1.1	No	1.5	No
118-B-1 Shallow_6	Rad	Uranium-238	U-238	pCi/g	0.76	1.1	No	1.2	No
118-B-1 Shallow_7	non-Rad	Aluminum	7429-90-5	ug/kg	6.09E+06	1.18E+07	No	2.88E+07	No
118-B-1 Shallow_7	non-Rad	Arsenic	7440-38-2	ug/kg	3,800	20,000	No	27,700	No
118-B-1 Shallow_7	non-Rad	Barium	7440-39-3	ug/kg	145,000	132,000	Yes	480,000	No
118-B-1 Shallow_7	non-Rad	Beryllium	7440-41-7	ug/kg	310	1,510	No	10,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-B-1 Shallow 7	non-Rad	Boron	7440-42-8	ug/kg	18,100	3,890	Yes	5,860	Yes
118-B-1 Shallow 7	non-Rad	Chromium	7440-47-3	ug/kg	9,500	18,500	No	320,000	No
118-B-1 Shallow 7	non-Rad	Cobalt	7440-48-4	ug/kg	7,600	15,700	No	110,000	No
118-B-1 Shallow 7	non-Rad	Copper	7440-50-8	ug/kg	25,700	22,000	Yes	61,000	No
118-B-1 Shallow 7	non-Rad	Iron	7439-89-6	ug/kg	1.87E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow 7	non-Rad	Lead	7439-92-1	ug/kg	12,900	10,200	Yes	74,100	No
118-B-1 Shallow 7	non-Rad	Manganese	7439-96-5	ug/kg	340,000	512,000	No	1.11E+06	No
118-B-1 Shallow 7	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
118-B-1 Shallow 7	non-Rad	Molybdenum	7439-98-7	ug/kg	2,100	470	Yes	3,170	No
118-B-1 Shallow 7	non-Rad	Nickel	7440-02-0	ug/kg	10,700	19,100	No	200,000	No
118-B-1 Shallow 7	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,170	3,210	No	4,042	No
118-B-1 Shallow 7	non-Rad	Vanadium	7440-62-2	ug/kg	40,900	85,100	No	140,000	No
118-B-1 Shallow 7	non-Rad	Zinc	7440-66-6	ug/kg	48,700	67,800	No	366,000	No
118-B-1 Shallow 7	Rad	Cesium-137	10045-97-3	pCi/g	0.58	1.1	No	1.6	No
118-B-1 Shallow 7	Rad	Uranium-233/234	U-233/234	pCi/g	0.72	1.1	No	1.5	No
118-B-1 Shallow 7	Rad	Uranium-238	U-238	pCi/g	0.73	1.1	No	1.2	No
118-B-1 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.01E+07	1.18E+07	No	2.88E+07	No
118-B-1 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	7,000	20,000	No	27,700	No
118-B-1 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	261,000	132,000	Yes	480,000	No
118-B-1 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	580	1,510	No	10,000	No
118-B-1 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	24,500	3,890	Yes	5,860	Yes
118-B-1 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	280	563	No	2,980	No
118-B-1 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	16,400	18,500	No	320,000	No
118-B-1 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	11,300	15,700	No	110,000	No
118-B-1 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	28,000	22,000	Yes	61,000	No
118-B-1 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.43E+07	3.26E+07	No	6.81E+07	No
118-B-1 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	34,300	10,200	Yes	74,100	No
118-B-1 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	421,000	512,000	No	1.11E+06	No
118-B-1 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	14,500	13	Yes	29	Yes
118-B-1 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	810	470	Yes	3,170	No
118-B-1 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	15,200	19,100	No	200,000	No
118-B-1 Shallow Focused	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,679	3,210	No	4,042	No
118-B-1 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	59,900	85,100	No	140,000	No
118-B-1 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	65,100	67,800	No	366,000	No
118-B-1 Shallow Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.35	1.1	No	1.6	No
118-B-1 Shallow Focused	Rad	Cobalt-60	10198-40-0	pCi/g	0.16	0.0084	Yes	0.039	Yes
118-B-1 Shallow Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.59	1.1	No	1.5	No
118-B-1 Shallow Focused	Rad	Uranium-238	U-238	pCi/g	0.56	1.1	No	1.2	No
118-B-10 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.46	0.0084	Yes	0.039	Yes
118-B-10 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,500	20,000	No	27,700	No
118-B-10 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	127,000	132,000	No	480,000	No
118-B-10 Shallow Focused	non-Rad	Cadmium	7440-43-9	ug/kg	50	563	No	2,980	No
118-B-10 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	11,400	18,500	No	320,000	No
118-B-10 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	16,200	10,200	Yes	74,100	No
118-B-10 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	230	13	Yes	29	Yes
118-B-3 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	11,500	18,500	No	320,000	No
118-B-3 Shallow	non-Rad	Lead	7439-92-1	ug/kg	5,200	10,200	No	74,100	No
118-B-3 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.13	1.1	No	1.6	No
118-B-3 Shallow	Rad	Cobalt-60	10198-40-0	pCi/g	0.086	0.0084	Yes	0.039	Yes
118-B-3 Shallow	Rad	Europium-154	15585-10-1	pCi/g	0.18	0.033	Yes	0.079	Yes
118-B-3 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,200	20,000	No	27,700	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-B-3 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	120,000	132,000	No	480,000	No
118-B-3 Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	435	563	No	2,980	No
118-B-3 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	17,300	18,500	No	320,000	No
118-B-3 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	43,900	10,200	Yes	74,100	No
118-B-3 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	34	13	Yes	29	Yes
118-B-3 Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.83	1.1	No	1.6	No
118-B-3 Shallow_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	0.17	0.0084	Yes	0.039	Yes
118-B-4 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.32	1.1	No	1.6	No
118-B-5 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.052	1.1	No	1.6	No
118-B-5 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,300	20,000	No	27,700	No
118-B-5 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	47,400	132,000	No	480,000	No
118-B-5 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	8,600	18,500	No	320,000	No
118-B-5 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	5,000	10,200	No	74,100	No
118-B-6 Deep	non-Rad	Lead	7439-92-1	ug/kg	5,100	10,200	No	74,100	No
118-B-6 Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,700	10,200	No	74,100	No
118-B-6 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	80	13	Yes	29	Yes
118-B-7 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,000	20,000	No	27,700	No
118-B-7 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	55,100	132,000	No	480,000	No
118-B-7 Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	280	563	No	2,980	No
118-B-7 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	10,300	18,500	No	320,000	No
118-B-7 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	22,900	10,200	Yes	74,100	No
118-B-7 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	110	13	Yes	29	Yes
118-B-7 Shallow_Focused	non-Rad	Selenium	7782-49-2	ug/kg	580	780	No	840	No
118-B-7 Shallow_Focused	non-Rad	Silver	7440-22-4	ug/kg	720	167	Yes	273	Yes
118-B-9 Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.59E+06	1.18E+07	No	2.88E+07	No
118-B-9 Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	695	130	Yes	385	Yes
118-B-9 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,900	20,000	No	27,700	No
118-B-9 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	141,000	132,000	Yes	480,000	No
118-B-9 Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	177	1,510	No	10,000	No
118-B-9 Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	9,700	3,890	Yes	5,860	Yes
118-B-9 Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	435	563	No	2,980	No
118-B-9 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	15,700	18,500	No	320,000	No
118-B-9 Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,500	15,700	No	110,000	No
118-B-9 Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	20,500	22,000	No	61,000	No
118-B-9 Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.42E+07	3.26E+07	No	6.81E+07	No
118-B-9 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	26,900	10,200	Yes	74,100	No
118-B-9 Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	354,000	512,000	No	1.11E+06	No
118-B-9 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	225	13	Yes	29	Yes
118-B-9 Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	400	470	No	3,170	No
118-B-9 Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	14,800	19,100	No	200,000	No
118-B-9 Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	71,600	85,100	No	140,000	No
118-B-9 Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	250,000	67,800	Yes	366,000	No
118-C-1 Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	4.57E+06	1.18E+07	No	2.88E+07	No
118-C-1 Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	3,300	20,000	No	27,700	No
118-C-1 Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	56,000	132,000	No	480,000	No
118-C-1 Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	880	1,510	No	10,000	No
118-C-1 Shallow_1	non-Rad	Boron	7440-42-8	ug/kg	2,100	3,890	No	5,860	No
118-C-1 Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	8,600	18,500	No	320,000	No
118-C-1 Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	8,400	15,700	No	110,000	No
118-C-1 Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	14,700	22,000	No	61,000	No
118-C-1 Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	1.91E+07	3.26E+07	No	6.81E+07	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-C-1 Shallow 1	non-Rad	Lead	7439-92-1	ug/kg	4,900	10,200	No	74,100	No
118-C-1 Shallow 1	non-Rad	Manganese	7439-96-5	ug/kg	362,000	512,000	No	1.11E+06	No
118-C-1 Shallow 1	non-Rad	Nickel	7440-02-0	ug/kg	10,200	19,100	No	200,000	No
118-C-1 Shallow 1	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,191	3,210	No	4,042	No
118-C-1 Shallow 1	non-Rad	Vanadium	7440-62-2	ug/kg	41,600	85,100	No	140,000	No
118-C-1 Shallow 1	non-Rad	Zinc	7440-66-6	ug/kg	39,100	67,800	No	366,000	No
118-C-1 Shallow 1	Rad	Cesium-137	10045-97-3	pCi/g	0.30	1.1	No	1.6	No
118-C-1 Shallow 1	Rad	Uranium-233/234	U-233/234	pCi/g	0.53	1.1	No	1.5	No
118-C-1 Shallow 1	Rad	Uranium-235	15117-96-1	pCi/g	0.027	0.11	No	0.39	No
118-C-1 Shallow 1	Rad	Uranium-238	U-238	pCi/g	0.74	1.1	No	1.2	No
118-C-1 Shallow 2	non-Rad	Aluminum	7429-90-5	ug/kg	4.69E+06	1.18E+07	No	2.88E+07	No
118-C-1 Shallow 2	non-Rad	Arsenic	7440-38-2	ug/kg	2,800	20,000	No	27,700	No
118-C-1 Shallow 2	non-Rad	Barium	7440-39-3	ug/kg	54,500	132,000	No	480,000	No
118-C-1 Shallow 2	non-Rad	Beryllium	7440-41-7	ug/kg	930	1,510	No	10,000	No
118-C-1 Shallow 2	non-Rad	Boron	7440-42-8	ug/kg	2,200	3,890	No	5,860	No
118-C-1 Shallow 2	non-Rad	Chromium	7440-47-3	ug/kg	6,200	18,500	No	320,000	No
118-C-1 Shallow 2	non-Rad	Cobalt	7440-48-4	ug/kg	7,700	15,700	No	110,000	No
118-C-1 Shallow 2	non-Rad	Copper	7440-50-8	ug/kg	13,400	22,000	No	61,000	No
118-C-1 Shallow 2	non-Rad	Iron	7439-89-6	ug/kg	1.90E+07	3.26E+07	No	6.81E+07	No
118-C-1 Shallow 2	non-Rad	Lead	7439-92-1	ug/kg	4,300	10,200	No	74,100	No
118-C-1 Shallow 2	non-Rad	Manganese	7439-96-5	ug/kg	359,000	512,000	No	1.11E+06	No
118-C-1 Shallow 2	non-Rad	Nickel	7440-02-0	ug/kg	10,400	19,100	No	200,000	No
118-C-1 Shallow 2	non-Rad	Vanadium	7440-62-2	ug/kg	46,300	85,100	No	140,000	No
118-C-1 Shallow 2	non-Rad	Zinc	7440-66-6	ug/kg	40,200	67,800	No	366,000	No
118-C-1 Shallow 2	Rad	Cesium-137	10045-97-3	pCi/g	0.15	1.1	No	1.6	No
118-C-1 Shallow 2	Rad	Cobalt-60	10198-40-0	pCi/g	1.5	0.0084	Yes	0.039	Yes
118-C-1 Shallow 3	non-Rad	Aluminum	7429-90-5	ug/kg	5.54E+06	1.18E+07	No	2.88E+07	No
118-C-1 Shallow 3	non-Rad	Arsenic	7440-38-2	ug/kg	5,800	20,000	No	27,700	No
118-C-1 Shallow 3	non-Rad	Barium	7440-39-3	ug/kg	78,400	132,000	No	480,000	No
118-C-1 Shallow 3	non-Rad	Beryllium	7440-41-7	ug/kg	700	1,510	No	10,000	No
118-C-1 Shallow 3	non-Rad	Boron	7440-42-8	ug/kg	3,200	3,890	No	5,860	No
118-C-1 Shallow 3	non-Rad	Cadmium	7440-43-9	ug/kg	120	563	No	2,980	No
118-C-1 Shallow 3	non-Rad	Chromium	7440-47-3	ug/kg	9,200	18,500	No	320,000	No
118-C-1 Shallow 3	non-Rad	Cobalt	7440-48-4	ug/kg	8,900	15,700	No	110,000	No
118-C-1 Shallow 3	non-Rad	Copper	7440-50-8	ug/kg	45,200	22,000	Yes	61,000	No
118-C-1 Shallow 3	non-Rad	Iron	7439-89-6	ug/kg	2.23E+07	3.26E+07	No	6.81E+07	No
118-C-1 Shallow 3	non-Rad	Lead	7439-92-1	ug/kg	23,100	10,200	Yes	74,100	No
118-C-1 Shallow 3	non-Rad	Manganese	7439-96-5	ug/kg	357,000	512,000	No	1.11E+06	No
118-C-1 Shallow 3	non-Rad	Mercury	7439-97-6	ug/kg	50	13	Yes	29	Yes
118-C-1 Shallow 3	non-Rad	Molybdenum	7439-98-7	ug/kg	4,500	470	Yes	3,170	Yes
118-C-1 Shallow 3	non-Rad	Nickel	7440-02-0	ug/kg	12,700	19,100	No	200,000	No
118-C-1 Shallow 3	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,456	3,210	No	4,042	No
118-C-1 Shallow 3	non-Rad	Vanadium	7440-62-2	ug/kg	53,200	85,100	No	140,000	No
118-C-1 Shallow 3	non-Rad	Zinc	7440-66-6	ug/kg	77,100	67,800	Yes	366,000	No
118-C-1 Shallow 3	Rad	Cesium-137	10045-97-3	pCi/g	0.96	1.1	No	1.6	No
118-C-1 Shallow 3	Rad	Cobalt-60	10198-40-0	pCi/g	0.042	0.0084	Yes	0.039	Yes
118-C-1 Shallow 3	Rad	Total beta radiostrontium	SR-RAD	pCi/g	0.28	0.18	Yes	0.37	No
118-C-1 Shallow 3	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	1.1	No	1.5	No
118-C-1 Shallow 3	Rad	Uranium-238	U-238	pCi/g	0.83	1.1	No	1.2	No
118-C-1 Shallow 4	non-Rad	Aluminum	7429-90-5	ug/kg	5.10E+06	1.18E+07	No	2.88E+07	No
118-C-1 Shallow 4	non-Rad	Arsenic	7440-38-2	ug/kg	2,400	20,000	No	27,700	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-C-1 Shallow_4	non-Rad	Barium	7440-39-3	ug/kg	285,000	132,000	Yes	480,000	No
118-C-1 Shallow_4	non-Rad	Beryllium	7440-41-7	ug/kg	580	1,510	No	10,000	No
118-C-1 Shallow_4	non-Rad	Boron	7440-42-8	ug/kg	4,900	3,890	Yes	5,860	No
118-C-1 Shallow_4	non-Rad	Chromium	7440-47-3	ug/kg	6,600	18,500	No	320,000	No
118-C-1 Shallow_4	non-Rad	Cobalt	7440-48-4	ug/kg	8,800	15,700	No	110,000	No
118-C-1 Shallow_4	non-Rad	Copper	7440-50-8	ug/kg	15,100	22,000	No	61,000	No
118-C-1 Shallow_4	non-Rad	Iron	7439-89-6	ug/kg	2.32E+07	3.26E+07	No	6.81E+07	No
118-C-1 Shallow_4	non-Rad	Lead	7439-92-1	ug/kg	5,000	10,200	No	74,100	No
118-C-1 Shallow_4	non-Rad	Manganese	7439-96-5	ug/kg	350,000	512,000	No	1.11E+06	No
118-C-1 Shallow_4	non-Rad	Nickel	7440-02-0	ug/kg	10,100	19,100	No	200,000	No
118-C-1 Shallow_4	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,997	3,210	No	4,042	No
118-C-1 Shallow_4	non-Rad	Vanadium	7440-62-2	ug/kg	55,400	85,100	No	140,000	No
118-C-1 Shallow_4	non-Rad	Zinc	7440-66-6	ug/kg	42,200	67,800	No	366,000	No
118-C-1 Shallow_4	Rad	Cesium-137	10045-97-3	pCi/g	1.2	1.1	Yes	1.6	No
118-C-1 Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	1.1	No	1.5	No
118-C-1 Shallow_4	Rad	Uranium-238	U-238	pCi/g	0.67	1.1	No	1.2	No
118-C-1 Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.52E+06	1.18E+07	No	2.88E+07	No
118-C-1 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	5,400	20,000	No	27,700	No
118-C-1 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	80,200	132,000	No	480,000	No
118-C-1 Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	340	1,510	No	10,000	No
118-C-1 Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	3,200	3,890	No	5,860	No
118-C-1 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	10,200	18,500	No	320,000	No
118-C-1 Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	10,500	15,700	No	110,000	No
118-C-1 Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	23,300	22,000	Yes	61,000	No
118-C-1 Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.19E+07	3.26E+07	No	6.81E+07	No
118-C-1 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	7,200	10,200	No	74,100	No
118-C-1 Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	446,000	512,000	No	1.11E+06	No
118-C-1 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	40	13	Yes	29	Yes
118-C-1 Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	14,100	19,100	No	200,000	No
118-C-1 Shallow_Focused	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	1,438	3,210	No	4,042	No
118-C-1 Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	46,400	85,100	No	140,000	No
118-C-1 Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	45,100	67,800	No	366,000	No
118-C-1 Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.55	1.1	No	1.6	No
118-C-1 Shallow_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	0.20	0.025	Yes	0.033	Yes
118-C-1 Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.68	1.1	No	1.5	No
118-C-1 Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.48	1.1	No	1.2	No
118-C-2 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.13	1.1	No	1.6	No
118-C-3:2 Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	120,000	10,200	Yes	74,100	Yes
118-C-3:2 Deep_Focused	non-Rad	Total U Isotopes	Total U Isotopes	ug/kg	2,110	3,210	No	4,042	No
118-C-3:2 Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.71	1.1	Yes	1.6	Yes
118-C-3:2 Deep_Focused	Rad	Cobalt-60	10198-40-0	pCi/g	1.7	0.0084	Yes	0.039	Yes
118-C-3:2 Deep_Focused	Rad	Europium-154	15585-10-1	pCi/g	1.5	0.033	Yes	0.079	Yes
118-C-3:2 Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	0.26	0.0038	Yes	0.019	Yes
118-C-3:2 Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	10	0.025	Yes	0.033	Yes
118-C-3:2 Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	38	0.18	Yes	0.37	Yes
118-C-3:2 Deep_Focused	Rad	Uranium-234	13966-29-5	pCi/g	0.81	1.1	No	1.5	No
118-C-3:2 Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.050	0.11	No	0.39	No
118-C-3:2 Deep_Focused	Rad	Uranium-238	U-238	pCi/g	0.70	1.1	No	1.2	No
118-C-3:3 Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.58E+06	1.18E+07	No	2.88E+07	No
118-C-3:3 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,400	20,000	No	27,700	No
118-C-3:3 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	80,000	132,000	No	480,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
118-C-3:3 Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	690	1,510	No	10,000	No
118-C-3:3 Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	1,400	3,890	No	5,860	No
118-C-3:3 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	16,400	18,500	No	320,000	No
118-C-3:3 Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	7,400	15,700	No	110,000	No
118-C-3:3 Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	38,300	22,000	Yes	61,000	No
118-C-3:3 Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.27E+07	3.26E+07	No	6.81E+07	No
118-C-3:3 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	7,900	10,200	No	74,100	No
118-C-3:3 Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	297,000	512,000	No	1.11E+06	No
118-C-3:3 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	800	13	Yes	29	Yes
118-C-3:3 Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	14,400	19,100	No	200,000	No
118-C-3:3 Shallow_Focused	non-Rad	Selenium	7782-49-2	ug/kg	370	780	No	840	No
118-C-3:3 Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,025	3,210	No	4,042	No
118-C-3:3 Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	48,700	85,100	No	140,000	No
118-C-3:3 Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	50,200	67,800	No	366,000	No
118-C-3:3 Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.63	1.1	No	1.5	No
118-C-3:3 Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.051	0.11	No	0.39	No
118-C-3:3 Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.68	1.1	No	1.2	No
118-C-4 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,500	20,000	No	27,700	No
118-C-4 Shallow	non-Rad	Barium	7440-39-3	ug/kg	44,800	132,000	No	480,000	No
118-C-4 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	7,800	18,500	No	320,000	No
118-C-4 Shallow	non-Rad	Lead	7439-92-1	ug/kg	20,100	10,200	Yes	74,100	No
118-C-4 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,795	3,210	No	4,042	No
118-C-4 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	1.1	No	1.5	No
118-C-4 Shallow	Rad	Uranium-238	U-238	pCi/g	0.60	1.1	No	1.2	No
120-B-1 Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.70E+06	1.18E+07	No	2.88E+07	No
120-B-1 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	5,000	20,000	No	27,700	No
120-B-1 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	135,000	132,000	Yes	480,000	No
120-B-1 Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	310	1,510	No	10,000	No
120-B-1 Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	8,100	3,890	Yes	5,860	Yes
120-B-1 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	273,000	18,500	Yes	320,000	No
120-B-1 Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	9,100	15,700	No	110,000	No
120-B-1 Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	19,800	22,000	No	61,000	No
120-B-1 Shallow_Focused	non-Rad	Fluoride	16984-48-8	ug/kg	3,800	2,810	Yes	73,300	No
120-B-1 Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.32E+07	3.26E+07	No	6.81E+07	No
120-B-1 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	15,400	10,200	Yes	74,100	No
120-B-1 Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	336,000	512,000	No	1.11E+06	No
120-B-1 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	90	13	Yes	29	Yes
120-B-1 Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	2,300	470	Yes	3,170	No
120-B-1 Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	13,800	19,100	No	200,000	No
120-B-1 Shallow_Focused	non-Rad	Silver	7440-22-4	ug/kg	230	167	Yes	273	No
120-B-1 Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	55,900	85,100	No	140,000	No
120-B-1 Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	72,200	67,800	Yes	366,000	No
126-B-3 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	5,698	20,000	No	27,700	No
126-B-3 Shallow	non-Rad	Barium	7440-39-3	ug/kg	95,187	132,000	No	480,000	No
126-B-3 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	550	1,510	No	10,000	No
126-B-3 Shallow	non-Rad	Boron	7440-42-8	ug/kg	4,975	3,890	Yes	5,860	No
126-B-3 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	356	563	No	2,980	No
126-B-3 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	11,526	18,500	No	320,000	No
126-B-3 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	11,663	15,700	No	110,000	No
126-B-3 Shallow	non-Rad	Copper	7440-50-8	ug/kg	23,531	22,000	Yes	61,000	No
126-B-3 Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,968	10,200	No	74,100	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-8C Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
126-B-3 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	472,105	512,000	No	1.11E+06	No
126-B-3 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	28	13	Yes	29	No
126-B-3 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	1,227	470	Yes	3,170	No
126-B-3 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	15,632	19,100	No	200,000	No
126-B-3 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	67,526	85,100	No	140,000	No
126-B-3 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	63,252	67,800	No	366,000	No
128-B-2 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,918	20,000	No	27,700	No
128-B-2 Shallow	non-Rad	Barium	7440-39-3	ug/kg	71,594	132,000	No	480,000	No
128-B-2 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	941	1,510	No	10,000	No
128-B-2 Shallow	non-Rad	Boron	7440-42-8	ug/kg	2,750	3,890	No	5,860	No
128-B-2 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	190	563	No	2,980	No
128-B-2 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	14,448	18,500	No	320,000	No
128-B-2 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	8,253	15,700	No	110,000	No
128-B-2 Shallow	non-Rad	Copper	7440-50-8	ug/kg	14,009	22,000	No	61,000	No
128-B-2 Shallow	non-Rad	Lead	7439-92-1	ug/kg	32,438	10,200	Yes	74,100	No
128-B-2 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	357,286	512,000	No	1.11E+06	No
128-B-2 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	22	13	Yes	29	No
128-B-2 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	1,077	470	Yes	3,170	No
128-B-2 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	11,421	19,100	No	200,000	No
128-B-2 Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,006	3,210	No	4,042	No
128-B-2 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	45,088	85,100	No	140,000	No
128-B-2 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	45,328	67,800	No	366,000	No
128-B-2 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.31	1.1	No	1.6	No
128-B-2 Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.70	1.1	No	1.5	No
128-B-2 Shallow	Rad	Uranium-238	U-238	pCi/g	0.68	1.1	No	1.2	No
128-B-3 Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	6.53E+06	1.18E+07	No	2.88E+07	No
128-B-3 Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	3,375	20,000	No	27,700	No
128-B-3 Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	87,728	132,000	No	480,000	No
128-B-3 Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	351	1,510	No	10,000	No
128-B-3 Shallow_1	non-Rad	Boron	7440-42-8	ug/kg	2,753	3,890	No	5,860	No
128-B-3 Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	14,012	18,500	No	320,000	No
128-B-3 Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	6,532	15,700	No	110,000	No
128-B-3 Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	16,975	22,000	No	61,000	No
128-B-3 Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	1.59E+07	3.26E+07	No	6.81E+07	No
128-B-3 Shallow_1	non-Rad	Lead	7439-92-1	ug/kg	5,471	10,200	No	74,100	No
128-B-3 Shallow_1	non-Rad	Manganese	7439-96-5	ug/kg	310,456	512,000	No	1.11E+06	No
128-B-3 Shallow_1	non-Rad	Mercury	7439-97-6	ug/kg	63	13	Yes	29	Yes
128-B-3 Shallow_1	non-Rad	Nickel	7440-02-0	ug/kg	13,472	19,100	No	200,000	No
128-B-3 Shallow_1	non-Rad	Vanadium	7440-62-2	ug/kg	34,972	85,100	No	140,000	No
128-B-3 Shallow_1	non-Rad	Zinc	7440-66-6	ug/kg	40,336	67,800	No	366,000	No
128-B-3 Shallow_2	non-Rad	Aluminum	7429-90-5	ug/kg	8.79E+06	1.18E+07	No	2.88E+07	No
128-B-3 Shallow_2	non-Rad	Arsenic	7440-38-2	ug/kg	5,473	20,000	No	27,700	No
128-B-3 Shallow_2	non-Rad	Barium	7440-39-3	ug/kg	126,504	132,000	No	480,000	No
128-B-3 Shallow_2	non-Rad	Beryllium	7440-41-7	ug/kg	450	1,510	No	10,000	No
128-B-3 Shallow_2	non-Rad	Boron	7440-42-8	ug/kg	6,364	3,890	Yes	5,860	Yes
128-B-3 Shallow_2	non-Rad	Cadmium	7440-43-9	ug/kg	520	563	No	2,980	No
128-B-3 Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	36,702	18,500	Yes	320,000	No
128-B-3 Shallow_2	non-Rad	Cobalt	7440-48-4	ug/kg	8,114	15,700	No	110,000	No
128-B-3 Shallow_2	non-Rad	Copper	7440-50-8	ug/kg	38,045	22,000	Yes	61,000	No
128-B-3 Shallow_2	non-Rad	Iron	7439-89-6	ug/kg	1.98E+07	3.26E+07	No	6.81E+07	No
128-B-3 Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	40,282	10,200	Yes	74,100	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
128-B-3 Shallow_2	non-Rad	Manganese	7439-96-5	ug/kg	398,092	512,000	No	1.11E+06	No
128-B-3 Shallow_2	non-Rad	Mercury	7439-97-6	ug/kg	72	13	Yes	29	Yes
128-B-3 Shallow_2	non-Rad	Molybdenum	7439-98-7	ug/kg	870	470	Yes	3,170	No
128-B-3 Shallow_2	non-Rad	Nickel	7440-02-0	ug/kg	17,711	19,100	No	200,000	No
128-B-3 Shallow_2	non-Rad	Silver	7440-22-4	ug/kg	241	167	Yes	273	No
128-B-3 Shallow_2	non-Rad	Vanadium	7440-62-2	ug/kg	41,172	85,100	No	140,000	No
128-B-3 Shallow_2	non-Rad	Zinc	7440-66-6	ug/kg	109,940	67,800	Yes	366,000	No
128-B-3 Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	8.03E+06	1.18E+07	No	2.88E+07	No
128-B-3 Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	3,947	20,000	No	27,700	No
128-B-3 Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	101,772	132,000	No	480,000	No
128-B-3 Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	425	1,510	No	10,000	No
128-B-3 Shallow_3	non-Rad	Boron	7440-42-8	ug/kg	2,624	3,890	No	5,860	No
128-B-3 Shallow_3	non-Rad	Cadmium	7440-43-9	ug/kg	590	563	Yes	2,980	No
128-B-3 Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	15,508	18,500	No	320,000	No
128-B-3 Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	8,273	15,700	No	110,000	No
128-B-3 Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	18,016	22,000	No	61,000	No
128-B-3 Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	1.98E+07	3.26E+07	No	6.81E+07	No
128-B-3 Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	8,356	10,200	No	74,100	No
128-B-3 Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	380,095	512,000	No	1.11E+06	No
128-B-3 Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	48	13	Yes	29	Yes
128-B-3 Shallow_3	non-Rad	Molybdenum	7439-98-7	ug/kg	4,700	470	Yes	3,170	Yes
128-B-3 Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	13,571	19,100	No	200,000	No
128-B-3 Shallow_3	non-Rad	Silver	7440-22-4	ug/kg	300	167	Yes	273	Yes
128-B-3 Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	41,734	85,100	No	140,000	No
128-B-3 Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	49,543	67,800	No	366,000	No
128-C-1 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	858	130	Yes	385	Yes
128-C-1 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,270	20,000	No	27,700	No
128-C-1 Shallow	non-Rad	Barium	7440-39-3	ug/kg	60,255	132,000	No	480,000	No
128-C-1 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	784	1,510	No	10,000	No
128-C-1 Shallow	non-Rad	Boron	7440-42-8	ug/kg	9,818	3,890	Yes	5,860	Yes
128-C-1 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	990	563	Yes	2,980	No
128-C-1 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	17,242	18,500	No	320,000	No
128-C-1 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	7,402	15,700	No	110,000	No
128-C-1 Shallow	non-Rad	Copper	7440-50-8	ug/kg	48,008	22,000	Yes	61,000	No
128-C-1 Shallow	non-Rad	Lead	7439-92-1	ug/kg	30,352	10,200	Yes	74,100	No
128-C-1 Shallow	non-Rad	Lithium	7439-93-2	ug/kg	6,737	13,300	No	19,200	No
128-C-1 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	315,815	512,000	No	1.11E+06	No
128-C-1 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	50	13	Yes	29	Yes
128-C-1 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	1,900	470	Yes	3,170	No
128-C-1 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	11,617	19,100	No	200,000	No
128-C-1 Shallow	non-Rad	Selenium	7782-49-2	ug/kg	1,300	780	Yes	840	Yes
128-C-1 Shallow	non-Rad	Silver	7440-22-4	ug/kg	6,600	167	Yes	273	Yes
128-C-1 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	39,675	85,100	No	140,000	No
128-C-1 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	70,414	67,800	Yes	366,000	No
128-C-1 Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	6,100	20,000	No	27,700	No
128-C-1 Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	94,710	132,000	No	480,000	No
128-C-1 Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	1,797	563	Yes	2,980	No
128-C-1 Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	19,600	18,500	Yes	320,000	No
128-C-1 Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	61,300	10,200	Yes	74,100	No
128-C-1 Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	200	13	Yes	29	Yes
128-C-1 Shallow_Focused	non-Rad	Silver	7440-22-4	ug/kg	150	167	No	273	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
1607-B1 Shallow Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.95E+06	1.18E+07	No	2.88E+07	No
1607-B1 Shallow Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,200	20,000	No	27,700	No
1607-B1 Shallow Focused	non-Rad	Barium	7440-39-3	ug/kg	138,000	132,000	Yes	480,000	No
1607-B1 Shallow Focused	non-Rad	Beryllium	7440-41-7	ug/kg	270	1,510	No	10,000	No
1607-B1 Shallow Focused	non-Rad	Boron	7440-42-8	ug/kg	2,400	3,890	No	5,860	No
1607-B1 Shallow Focused	non-Rad	Chromium	7440-47-3	ug/kg	9,600	18,500	No	320,000	No
1607-B1 Shallow Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,900	15,700	No	110,000	No
1607-B1 Shallow Focused	non-Rad	Copper	7440-50-8	ug/kg	20,200	22,000	No	61,000	No
1607-B1 Shallow Focused	non-Rad	Iron	7439-89-6	ug/kg	2.30E+07	3.26E+07	No	6.81E+07	No
1607-B1 Shallow Focused	non-Rad	Lead	7439-92-1	ug/kg	8,600	10,200	No	74,100	No
1607-B1 Shallow Focused	non-Rad	Manganese	7439-96-5	ug/kg	304,000	512,000	No	1.11E+06	No
1607-B1 Shallow Focused	non-Rad	Mercury	7439-97-6	ug/kg	230	13	Yes	29	Yes
1607-B1 Shallow Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	570	470	Yes	3,170	No
1607-B1 Shallow Focused	non-Rad	Nickel	7440-02-0	ug/kg	11,300	19,100	No	200,000	No
1607-B1 Shallow Focused	non-Rad	Vanadium	7440-62-2	ug/kg	42,200	85,100	No	140,000	No
1607-B1 Shallow Focused	non-Rad	Zinc	7440-66-6	ug/kg	93,900	67,800	Yes	366,000	No
1607-B1 Shallow Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.12	1.1	No	1.6	No
1607-B10 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,500	20,000	No	27,700	No
1607-B10 Shallow	non-Rad	Barium	7440-39-3	ug/kg	82,400	132,000	No	480,000	No
1607-B10 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	160	563	No	2,980	No
1607-B10 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	25,200	18,500	Yes	320,000	No
1607-B10 Shallow	non-Rad	Lead	7439-92-1	ug/kg	17,900	10,200	Yes	74,100	No
1607-B10 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	380	13	Yes	29	Yes
1607-B10 Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.054	1.1	No	1.6	No
1607-B11 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	5,900	20,000	No	27,700	No
1607-B11 Shallow	non-Rad	Barium	7440-39-3	ug/kg	76,500	132,000	No	480,000	No
1607-B11 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	14,000	18,500	No	320,000	No
1607-B11 Shallow	non-Rad	Lead	7439-92-1	ug/kg	10,300	10,200	Yes	74,100	No
1607-B11 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	30	13	Yes	29	Yes
1607-B2:1 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	457	130	Yes	385	Yes
1607-B2:1 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	7,121	20,000	No	27,700	No
1607-B2:1 Shallow	non-Rad	Barium	7440-39-3	ug/kg	386,965	132,000	Yes	480,000	No
1607-B2:1 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	760	1,510	No	10,000	No
1607-B2:1 Shallow	non-Rad	Boron	7440-42-8	ug/kg	19,810	3,890	Yes	5,860	Yes
1607-B2:1 Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	128	563	No	2,980	No
1607-B2:1 Shallow	non-Rad	Chromium	7440-47-3	ug/kg	19,106	18,500	Yes	320,000	No
1607-B2:1 Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	12,463	15,700	No	110,000	No
1607-B2:1 Shallow	non-Rad	Copper	7440-50-8	ug/kg	30,171	22,000	Yes	61,000	No
1607-B2:1 Shallow	non-Rad	Lead	7439-92-1	ug/kg	9,814	10,200	No	74,100	No
1607-B2:1 Shallow	non-Rad	Manganese	7439-96-5	ug/kg	577,831	512,000	Yes	1.11E+06	No
1607-B2:1 Shallow	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
1607-B2:1 Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	1,097	470	Yes	3,170	No
1607-B2:1 Shallow	non-Rad	Nickel	7440-02-0	ug/kg	20,845	19,100	Yes	200,000	No
1607-B2:1 Shallow	non-Rad	Silver	7440-22-4	ug/kg	140	167	No	273	No
1607-B2:1 Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	54,015	85,100	No	140,000	No
1607-B2:1 Shallow	non-Rad	Zinc	7440-66-6	ug/kg	67,465	67,800	No	366,000	No
1607-B2:2 Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.99E+06	1.18E+07	No	2.88E+07	No
1607-B2:2 Shallow	non-Rad	Antimony	7440-36-0	ug/kg	510	130	Yes	385	Yes
1607-B2:2 Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,098	20,000	No	27,700	No
1607-B2:2 Shallow	non-Rad	Barium	7440-39-3	ug/kg	115,790	132,000	No	480,000	No
1607-B2:2 Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	444	1,510	No	10,000	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
1607-B2:2_Shallow	non-Rad	Boron	7440-42-8	ug/kg	4,666	3,890	Yes	5,860	No
1607-B2:2_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	249	563	No	2,980	No
1607-B2:2_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,679	18,500	No	320,000	No
1607-B2:2_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	8,488	15,700	No	110,000	No
1607-B2:2_Shallow	non-Rad	Copper	7440-50-8	ug/kg	51,480	22,000	Yes	61,000	No
1607-B2:2_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.05E+07	3.26E+07	No	6.81E+07	No
1607-B2:2_Shallow	non-Rad	Lead	7439-92-1	ug/kg	10,463	10,200	Yes	74,100	No
1607-B2:2_Shallow	non-Rad	Lithium	7439-93-2	ug/kg	8,515	13,300	No	19,200	No
1607-B2:2_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	367,714	512,000	No	1.11E+06	No
1607-B2:2_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	240	13	Yes	29	Yes
1607-B2:2_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	395	470	No	3,170	No
1607-B2:2_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,682	19,100	No	200,000	No
1607-B2:2_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	46,182	85,100	No	140,000	No
1607-B2:2_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	52,128	67,800	No	366,000	No
1607-B2:2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.42	1.1	No	1.6	No
1607-B2:2_Shallow	Rad	Total beta radiostromtrium	SR-RAD	pCi/g	0.90	0.18	Yes	0.37	Yes
1607-B7_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,100	20,000	No	27,700	No
1607-B7_Shallow	non-Rad	Barium	7440-39-3	ug/kg	80,800	132,000	No	480,000	No
1607-B7_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	236	563	No	2,980	No
1607-B7_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,300	18,500	No	320,000	No
1607-B7_Shallow	non-Rad	Lead	7439-92-1	ug/kg	43,000	10,200	Yes	74,100	No
1607-B7_Shallow	non-Rad	Selenium	7782-49-2	ug/kg	699	780	No	840	No
1607-B7_Shallow	non-Rad	Silver	7440-22-4	ug/kg	96	167	No	273	No
1607-B8_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,100	20,000	No	27,700	No
1607-B8_Shallow	non-Rad	Barium	7440-39-3	ug/kg	67,300	132,000	No	480,000	No
1607-B8_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	102	563	No	2,980	No
1607-B8_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	12,500	18,500	No	320,000	No
1607-B8_Shallow	non-Rad	Lead	7439-92-1	ug/kg	166,000	10,200	Yes	74,100	Yes
1607-B8_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	103	13	Yes	29	Yes
1607-B8_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.072	1.1	No	1.6	No
1607-B9_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,511	20,000	No	27,700	No
1607-B9_Shallow	non-Rad	Barium	7440-39-3	ug/kg	63,408	132,000	No	480,000	No
1607-B9_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	479	563	No	2,980	No
1607-B9_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	11,970	18,500	No	320,000	No
1607-B9_Shallow	non-Rad	Lead	7439-92-1	ug/kg	10,831	10,200	Yes	74,100	No
1607-B9_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	68	13	Yes	29	Yes
1607-B9_Shallow	non-Rad	Selenium	7782-49-2	ug/kg	435	780	No	840	No
600-232_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,048	20,000	No	27,700	No
600-232_Shallow	non-Rad	Barium	7440-39-3	ug/kg	58,814	132,000	No	480,000	No
600-232_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	78	563	No	2,980	No
600-232_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	8,520	18,500	No	320,000	No
600-232_Shallow	non-Rad	Lead	7439-92-1	ug/kg	4,394	10,200	No	74,100	No
600-232_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes	29	No
600-233_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	51,200	132,000	No	480,000	No
600-233_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	410	1,510	No	10,000	No
600-233_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	1,500	3,890	No	5,860	No
600-233_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	280	563	No	2,980	No
600-233_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	7,900	18,500	No	320,000	No
600-233_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	6,300	15,700	No	110,000	No
600-233_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	11,500	22,000	No	61,000	No
600-233_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	4,900	10,200	No	74,100	No



Table 7-3. Comparison of EPCs for Waste Site Decision Units in the 100-BC Source OU to Hanford Site Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?	Maximum Background Value	Is EPC > Maximum Background?
600-233_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	270,000	512,000	No	1.11E+06	No
600-233_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	8,300	19,100	No	200,000	No
600-233_Shallow_Focused	non-Rad	Selenium	7782-49-2	ug/kg	3,000	780	Yes	840	Yes
600-233_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	37,000	85,100	No	140,000	No
600-233_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	33,800	67,800	No	366,000	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg · m or pCi · m) (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-1_Shallow_1	Bis(2-ethylhexyl) phthalate	µg/kg	45	— <sup>c</sup>	59	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-1_Shallow_1	Diethylphthalate	µg/kg	48	63,829	59	1,089	—	330	1,089	Scaled GWP SSL	No
100-B-1_Shallow_1	Di-n-butylphthalate	µg/kg	24	88,471	59	1,510	—	330	1,510	Scaled GWP SSL	No
100-B-1_Shallow_2	4,4'-DDD (Dichlorodiphenyldichloroethane)	µg/kg	1.5	836,540	80	10,418	—	3.3	10,418	Scaled GWP SSL	No
100-B-1_Shallow_2	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	1.3	— <sup>c</sup>	80	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
100-B-1_Shallow_2	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	2.9	— <sup>c</sup>	80	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Aldrin	µg/kg	1.1	9,878	80	123	—	1.7	0,123	Scaled GWP SSL	No
100-B-1_Shallow_2	Alpha-BHC	µg/kg	1.0	1.7	80	0.021	—	1.7	1.7	RDL	No
100-B-1_Shallow_2	Alpha-Chlordane	µg/kg	1.3	1.42E+06	80	17,697	—	17	17,697	Scaled GWP SSL	No
100-B-1_Shallow_2	Anthracene	µg/kg	92	4.27E+07	80	531,455	—	330	531,455	Scaled GWP SSL	No
100-B-1_Shallow_2	Aroclor-1254	µg/kg	33	— <sup>c</sup>	80	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Benzo(a)anthracene	µg/kg	120	— <sup>c</sup>	80	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Benzo(a)pyrene	µg/kg	30	— <sup>c</sup>	80	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Benzo(b)fluoranthene	µg/kg	55	— <sup>c</sup>	80	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Benzo(k)fluoranthene	µg/kg	65	— <sup>c</sup>	80	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-1_Shallow_2	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	µg/kg	6.8	3.8	80	0.047	—	1.7	1.7	RDL	Yes
100-B-1_Shallow_2	Bis(2-ethylhexyl) phthalate	µg/kg	41	— <sup>c</sup>	80	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Carbazole	µg/kg	33	537	80	6.7	—	330	330	RDL	No
100-B-1_Shallow_2	Chlordane	µg/kg	1.3	1.42E+06	80	17,697	—	1.7	17,697	Scaled GWP SSL	No
100-B-1_Shallow_2	Chrysene	µg/kg	150	— <sup>c</sup>	80	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Dibenzofuran	µg/kg	22	3,353	80	42	—	330	330	RDL	No
100-B-1_Shallow_2	Dieldrin	µg/kg	1.3	166	80	2.1	—	3.3	3.3	RDL	No
100-B-1_Shallow_2	Di-n-butylphthalate	µg/kg	35	88,471	80	1,102	—	330	1,102	Scaled GWP SSL	No
100-B-1_Shallow_2	Endosulfan I	µg/kg	1.3	7,192	80	90	—	3	0,090	Scaled GWP SSL	No
100-B-1_Shallow_2	Endosulfan II	µg/kg	1.5	7,192	80	90	—	3	0,090	Scaled GWP SSL	No
100-B-1_Shallow_2	Endrin	µg/kg	1.5	1,219	80	15	—	3	0,015	Scaled GWP SSL	No
100-B-1_Shallow_2	Fluoranthene	µg/kg	700	3.89E+08	80	4.84E+06	—	330	4,844,334	Scaled GWP SSL	No
100-B-1_Shallow_2	Fluorene	µg/kg	35	97,154	80	1,210	—	330	1,210	Scaled GWP SSL	No
100-B-1_Shallow_2	Gamma-BHC (Lindane)	µg/kg	1.2	3.8	80	0.047	—	1.7	1.7	RDL	No
100-B-1_Shallow_2	Heptachlor	µg/kg	5.5	8.7	80	0.11	—	2	2	RDL	Yes
100-B-1_Shallow_2	Heptachlor epoxide	µg/kg	1.4	— <sup>c</sup>	80	— <sup>c</sup>	—	2	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Methoxychlor	µg/kg	5.6	— <sup>c</sup>	80	— <sup>c</sup>	—	20	—	— <sup>c</sup>	—
100-B-1_Shallow_2	Pyrene	µg/kg	750	3.89E+08	80	4.84E+06	—	330	4,844,334	Scaled GWP SSL	No
100-B-1_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	103	— <sup>c</sup>	38	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-1_Shallow_Focused	Total petroleum hydrocarbons	µg/kg	9,520	1.00E+06 <sup>d</sup>	38	1000000	—	—	1,000,000	— <sup>d</sup>	No
100-B-11_Shallow_Focused	Antimony	µg/kg	1,400	1.19E+07	2.0	5.95E+06	130	600	5,948,913	Scaled GWP SSL	No
100-B-11_Shallow_Focused	Boron	µg/kg	5,700	348,488	2.0	174,244	3,890	2,000	174,244	Scaled GWP SSL	No
100-B-11_Shallow_Focused	Lead	µg/kg	16,600	— <sup>c</sup>	2.0	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-11_Shallow_Focused	Mercury	µg/kg	18	1.34E+07	2.0	6.72E+06	13	200	6,715,431	Scaled GWP SSL	No
100-B-11_Shallow_Focused	Molybdenum	µg/kg	551	563,885	2.0	281,942	470	2,000	281,942	Scaled GWP SSL	No
100-B-11_Shallow_Focused	Total beta radiostrontium	pCi/g	0.25	2,121	2.0	1,060	0.18	1	1,060	Scaled GWP SSL	No
100-B-14:1_Deep_Focused	Carbon-14	pCi/g	275	— <sup>c</sup>	2.0	— <sup>c</sup>	—	2	—	— <sup>c</sup>	—
100-B-14:1_Shallow	Hexavalent Chromium	µg/kg	336	6,000 <sup>e</sup>	45	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-14:2_Shallow_1	2-Methylnaphthalene	µg/kg	34	2,896	59	49	—	330	330	RDL	No
100-B-14:2_Shallow_1	Barium	µg/kg	256,706	3.89E+08	59	6.57E+06	132,000	2,000	6,570,946	Scaled GWP SSL	No
100-B-14:2_Shallow_1	Benzo(a)pyrene	µg/kg	21	— <sup>c</sup>	59	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-14:2_Shallow_1	Benzo(b)fluoranthene	µg/kg	23	— <sup>c</sup>	59	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-14:2_Shallow_1	Benzo(k)fluoranthene	µg/kg	22	— <sup>c</sup>	59	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-14:2_Shallow_1	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	µg/kg	0.60	3.8	59	0.064	—	1.7	1.7	RDL	No
100-B-14:2_Shallow_1	Chrysene	µg/kg	22	— <sup>c</sup>	59	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-B-14:2_Shallow_1	Hexavalent Chromium	µg/kg	277	6,000 <sup>e</sup>	59	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-14:2_Shallow_1	Mercury	µg/kg	36	1.34E+07	59	226,873	13	200	226,873	Scaled GWP SSL	No
100-B-14:2_Shallow_1	Molybdenum	µg/kg	685	563,885	59	9,525	470	2,000	9,525	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width In Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Hanford Site 90th Percentile Background Value ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Required Detection Limit ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Selected GWP SSL ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-14:2_Shallow_1	Naphthalene	$\mu\text{g}/\text{kg}$	24	6,798	59	115	--	330	330	RDL	No
100-B-14:2_Shallow_1	Strontium	$\mu\text{g}/\text{kg}$	59,947	3.89E+08	59	6.57E+06	--	1,000	6,570,946	Scaled GWP SSL	No
100-B-14:2_Shallow_1	Total beta radiostrontium	$\text{pCi}/\text{g}$	0.31	2,121	59	36	0.18	1	0,036	Scaled GWP SSL	No
100-B-14:2_Shallow_2	4,4'-DDD (Dichlorodiphenyldichloroethane)	$\mu\text{g}/\text{kg}$	2.1	836,540	12	68,569	--	3.3	68,569	Scaled GWP SSL	No
100-B-14:2_Shallow_2	4,4'-DDE (Dichlorodiphenyldichloroethylene)	$\mu\text{g}/\text{kg}$	7.6	-- <sup>c</sup>	12	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	4,4'-DDT (Dichlorodiphenyltrichloroethane)	$\mu\text{g}/\text{kg}$	6.7	-- <sup>c</sup>	12	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Acenaphthene	$\mu\text{g}/\text{kg}$	197	84,728	12	6,945	--	330	6,945	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Aldrin	$\mu\text{g}/\text{kg}$	2.4	9,878	12	810	--	1.7	0,810	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Anthracene	$\mu\text{g}/\text{kg}$	345	4.27E+07	12	3.50E+06	--	330	3,498,018	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Antimony	$\mu\text{g}/\text{kg}$	640	1.19E+07	12	975,232	130	600	975,232	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Aroclor-1254	$\mu\text{g}/\text{kg}$	81	-- <sup>c</sup>	12	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Aroclor-1260	$\mu\text{g}/\text{kg}$	5.3	-- <sup>c</sup>	12	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Benzo(a)anthracene	$\mu\text{g}/\text{kg}$	703	-- <sup>c</sup>	12	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Benzo(a)pyrene	$\mu\text{g}/\text{kg}$	655	-- <sup>c</sup>	12	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Benzo(b)fluoranthene	$\mu\text{g}/\text{kg}$	534	-- <sup>c</sup>	12	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Benzo(k)fluoranthene	$\mu\text{g}/\text{kg}$	564	-- <sup>c</sup>	12	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Bis(2-ethylhexyl) phthalate	$\mu\text{g}/\text{kg}$	27	-- <sup>c</sup>	12	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Carbazole	$\mu\text{g}/\text{kg}$	214	537	12	44	--	330	330	RDL	No
100-B-14:2_Shallow_2	Chlordane	$\mu\text{g}/\text{kg}$	1.2	1.42E+06	12	116,479	--	1.7	116,479	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Chrysene	$\mu\text{g}/\text{kg}$	830	-- <sup>c</sup>	12	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Copper	$\mu\text{g}/\text{kg}$	23,864	7.69E+06	12	630,297	22,000	1,000	630,297	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Dibenz[a,h]anthracene	$\mu\text{g}/\text{kg}$	318	-- <sup>c</sup>	12	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Dibenzofuran	$\mu\text{g}/\text{kg}$	82	3,353	12	275	--	330	330	RDL	No
100-B-14:2_Shallow_2	Dieldrin	$\mu\text{g}/\text{kg}$	3.6	166	12	14	--	3.3	0,014	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Di-n-butylphthalate	$\mu\text{g}/\text{kg}$	28	88,471	12	7,252	--	330	7,252	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Di-n-octylphthalate	$\mu\text{g}/\text{kg}$	95	-- <sup>c</sup>	12	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Fluoranthene	$\mu\text{g}/\text{kg}$	1,336	3.89E+08	12	3.19E+07	--	330	31,885,246	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Fluorene	$\mu\text{g}/\text{kg}$	130	97,154	12	7,963	--	330	7,963	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	418	6,000 <sup>e</sup>	12	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-14:2_Shallow_2	Indeno(1,2,3-cd)pyrene	$\mu\text{g}/\text{kg}$	423	-- <sup>c</sup>	12	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Lead	$\mu\text{g}/\text{kg}$	35,014	-- <sup>c</sup>	12	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Mercury	$\mu\text{g}/\text{kg}$	118	1.34E+07	12	1.10E+06	13	200	1,100,890	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Molybdenum	$\mu\text{g}/\text{kg}$	794	563,885	12	46,220	470	2,000	46,220	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Naphthalene	$\mu\text{g}/\text{kg}$	55	6,798	12	557	--	330	0,557	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Pentachlorophenol	$\mu\text{g}/\text{kg}$	1,900	330	12	27	--	330	330	RDL	Yes
100-B-14:2_Shallow_2	Pyrene	$\mu\text{g}/\text{kg}$	1,289	3.89E+08	12	3.19E+07	--	330	31,885,246	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Strontium	$\mu\text{g}/\text{kg}$	35,581	3.89E+08	12	3.19E+07	--	1,000	31,885,246	Scaled GWP SSL	No
100-B-14:2_Shallow_2	Tin	$\mu\text{g}/\text{kg}$	1,100	-- <sup>c</sup>	12	-- <sup>c</sup>	--	10,000	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_2	Zinc	$\mu\text{g}/\text{kg}$	85,443	3.89E+08	12	3.19E+07	67,800	1,000	31,885,246	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Aroclor-1254	$\mu\text{g}/\text{kg}$	8.9	-- <sup>c</sup>	19	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	$\mu\text{g}/\text{kg}$	0.62	3.8	19	0.20	--	1.7	1.7	RDL	No
100-B-14:2_Shallow_3	Bis(2-ethylhexyl) phthalate	$\mu\text{g}/\text{kg}$	35	-- <sup>c</sup>	19	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	Di-n-butylphthalate	$\mu\text{g}/\text{kg}$	21	88,471	19	4,584	--	330	4,584	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Endrin	$\mu\text{g}/\text{kg}$	1.3	1,219	19	63	--	3	0,063	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	363	6,000 <sup>e</sup>	19	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-14:2_Shallow_3	Mercury	$\mu\text{g}/\text{kg}$	28	1.34E+07	19	695,900	13	200	695,900	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Methoxychlor	$\mu\text{g}/\text{kg}$	49	-- <sup>c</sup>	19	-- <sup>c</sup>	--	20	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_3	Molybdenum	$\mu\text{g}/\text{kg}$	522	563,885	19	29,217	470	2,000	29,217	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Pyrene	$\mu\text{g}/\text{kg}$	20	3.89E+08	19	2.02E+07	--	330	20,155,440	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Strontium	$\mu\text{g}/\text{kg}$	34,255	3.89E+08	19	2.02E+07	--	1,000	20,155,440	Scaled GWP SSL	No
100-B-14:2_Shallow_3	Tin	$\mu\text{g}/\text{kg}$	1,351	-- <sup>c</sup>	19	-- <sup>c</sup>	--	10,000	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	Bis(2-ethylhexyl) phthalate	$\mu\text{g}/\text{kg}$	300	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-14:2_Shallow_Focused	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	248	6,000 <sup>e</sup>	2.0	6,000	--	1,000	6,000	-- <sup>e</sup>	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-14:2_Shallow_Focused	Mercury	µg/kg	44	1.34E+07	2.0	6.72E+06	13	200	6,715,431	Scaled GWP SSL	No
100-B-14:2_Shallow_Focused	Strontium	µg/kg	34,200	3.89E+08	2.0	1.95E+08	--	1,000	194,500,000	Scaled GWP SSL	No
100-B-14:3_Deep_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	46	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-14:3_Deep_Focused	Molybdenum	µg/kg	528	563,885	2.0	281,942	470	2,000	281,942	Scaled GWP SSL	No
100-B-14:5_Shallow_Focused	Antimony	µg/kg	310	1.19E+07	0.010	1.19E+09	130	600	1,189,782,694	Scaled GWP SSL	No
100-B-14:5_Shallow_Focused	Boron	µg/kg	4,400	348,488	0.010	3.48E+07	3,890	2,000	34,848,814	Scaled GWP SSL	No
100-B-14:5_Shallow_Focused	Molybdenum	µg/kg	560	563,885	0.010	5.64E+07	470	2,000	56,388,460	Scaled GWP SSL	No
100-B-14:5_Shallow_Focused	Zinc	µg/kg	76,200	3.89E+08	0.010	3.89E+10	67,800	1,000	38,900,000,000	Scaled GWP SSL	No
100-B-14:6_Shallow_Focused	Barium	µg/kg	364,000	3.89E+08	11	3.57E+07	132,000	2,000	35,688,073	Scaled GWP SSL	No
100-B-14:6_Shallow_Focused	Boron	µg/kg	5,800	348,488	11	31,971	3,890	2,000	31,971	Scaled GWP SSL	No
100-B-14:6_Shallow_Focused	Chromium	µg/kg	49,100	-- <sup>c</sup>	11	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	Lead	µg/kg	10,800	-- <sup>c</sup>	11	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-14:6_Shallow_Focused	Mercury	µg/kg	1,400	1.34E+07	11	1.23E+06	13	200	1,232,189	Scaled GWP SSL	No
100-B-14:6_Shallow_Focused	Molybdenum	µg/kg	940	563,885	11	51,733	470	2,000	51,733	Scaled GWP SSL	No
100-B-14:6_Shallow_Focused	Nickel	µg/kg	25,100	3.89E+08	11	3.57E+07	19,100	4,000	35,688,073	Scaled GWP SSL	No
100-B-14:7_Shallow_Focused	Antimony	µg/kg	410	1.19E+07	5.7	2.09E+06	130	600	2,087,338	Scaled GWP SSL	No
100-B-14:7_Shallow_Focused	Boron	µg/kg	5,400	348,488	5.7	61,138	3,890	2,000	61,138	Scaled GWP SSL	No
100-B-14:7_Shallow_Focused	Chromium	µg/kg	25,400	-- <sup>c</sup>	5.7	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	Lead	µg/kg	12,100	-- <sup>c</sup>	5.7	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-14:7_Shallow_Focused	Mercury	µg/kg	80	1.34E+07	5.7	2.36E+06	13	200	2,356,291	Scaled GWP SSL	No
100-B-14:7_Shallow_Focused	Molybdenum	µg/kg	760	563,885	5.7	98,927	470	2,000	98,927	Scaled GWP SSL	No
100-B-14:7_Shallow_Focused	Nickel	µg/kg	22,700	3.89E+08	5.7	6.82E+07	19,100	4,000	68,245,614	Scaled GWP SSL	No
100-B-14:7_Shallow_Focused	Zinc	µg/kg	79,400	3.89E+08	5.7	6.82E+07	67,800	1,000	68,245,614	Scaled GWP SSL	No
100-B-16_Shallow_Focused	Aroclor-1260	µg/kg	24	-- <sup>c</sup>	11	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Barium	µg/kg	226,000	3.89E+08	11	3.47E+07	132,000	2,000	34,732,143	Scaled GWP SSL	No
100-B-16_Shallow_Focused	Benzo(a)anthracene	µg/kg	26	-- <sup>c</sup>	11	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Benzo(a)pyrene	µg/kg	21	-- <sup>c</sup>	11	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	61	-- <sup>c</sup>	11	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	46	-- <sup>c</sup>	11	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	100	-- <sup>c</sup>	11	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Chrysene	µg/kg	110	-- <sup>c</sup>	11	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-B-16_Shallow_Focused	Di-n-butylphthalate	µg/kg	37	88,471	11	7,899	--	330	7,899	Scaled GWP SSL	No
100-B-16_Shallow_Focused	Fluoranthene	µg/kg	150	3.89E+08	11	3.47E+07	--	330	34,732,143	Scaled GWP SSL	No
100-B-16_Shallow_Focused	Mercury	µg/kg	30	1.34E+07	11	1.20E+06	13	200	1,199,184	Scaled GWP SSL	No
100-B-16_Shallow_Focused	Pyrene	µg/kg	120	3.89E+08	11	3.47E+07	--	330	34,732,143	Scaled GWP SSL	No
100-B-16_Shallow_Focused	Silver	µg/kg	1,500	27,530	11	2,458	167	200	2,458	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Acenaphthene	µg/kg	170	84,728	20	4,301	--	330	4,301	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Acetone	µg/kg	73	17,372	20	882	--	20	0,882	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Anthracene	µg/kg	580	4.27E+07	20	2.17E+06	--	330	2,166,285	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Antimony	µg/kg	9,300	1.19E+07	20	603,951	130	600	603,951	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Aroclor-1254	µg/kg	39	-- <sup>c</sup>	20	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Aroclor-1260	µg/kg	95	-- <sup>c</sup>	20	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Barium	µg/kg	1.30E+06	3.89E+08	20	1.97E+07	132,000	2,000	19,746,193	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Benzo(a)anthracene	µg/kg	250	-- <sup>c</sup>	20	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Benzo(a)pyrene	µg/kg	300	-- <sup>c</sup>	20	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	240	-- <sup>c</sup>	20	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	100	-- <sup>c</sup>	20	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Boron	µg/kg	34,200	348,488	20	17,690	3,890	2,000	17,690	Scaled GWP SSL	Yes
100-B-18_Shallow_Focused	Cadmium	µg/kg	13,200	1,256	20	64	1,510	50	1,510	Background Value	Yes
100-B-18_Shallow_Focused	Chrysene	µg/kg	270	-- <sup>c</sup>	20	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Dibenz[a,h]anthracene	µg/kg	30	-- <sup>c</sup>	20	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
100-B-18_Shallow_Focused	Fluoranthene	µg/kg	300	3.89E+08	20	1.97E+07	--	330	19,746,193	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Fluorene	µg/kg	530	97,154	20	4,932	--	330	4,932	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-18_Shallow_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	210	— <sup>c</sup>	20	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-18_Shallow_Focused	Lead	µg/kg	25,300	— <sup>c</sup>	20	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-18_Shallow_Focused	Mercury	µg/kg	2,200	1.34E+07	20	681,770	13	200	681,770	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Molybdenum	µg/kg	960	563,885	20	28,624	470	2,000	28,624	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Naphthalene	µg/kg	440	6,798	20	345	—	330	0,345	Scaled GWP SSL	Yes
100-B-18_Shallow_Focused	Pyrene	µg/kg	510	3.89E+08	20	1.97E+07	—	330	19,746,193	Scaled GWP SSL	No
100-B-18_Shallow_Focused	Total petroleum hydrocarbons	µg/kg	222,000	1.00E+06 <sup>d</sup>	20	1000000	—	—	1,000,000	— <sup>d</sup>	No
100-B-18_Shallow_Focused	Zinc	µg/kg	77,600	3.89E+08	20	1.97E+07	67,800	1,000	19,746,193	Scaled GWP SSL	No
100-B-19_Shallow_1	Antimony	µg/kg	970	1.19E+07	64	186,779	130	600	186,779	Scaled GWP SSL	No
100-B-19_Shallow_1	Chromium	µg/kg	38,860	— <sup>e</sup>	64	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
100-B-19_Shallow_1	Hexavalent Chromium	µg/kg	886	6,000 <sup>e</sup>	64	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-19_Shallow_1	Lead	µg/kg	25,097	— <sup>e</sup>	64	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-19_Shallow_1	Mercury	µg/kg	60	1.34E+07	64	210,846	13	200	210,846	Scaled GWP SSL	No
100-B-19_Shallow_2	Antimony	µg/kg	1,194	1.19E+07	16	725,477	130	600	725,477	Scaled GWP SSL	No
100-B-19_Shallow_2	Hexavalent Chromium	µg/kg	190	6,000 <sup>e</sup>	16	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-19_Shallow_2	Mercury	µg/kg	24	1.34E+07	16	818,955	13	200	818,955	Scaled GWP SSL	No
100-B-19_Shallow_2	Molybdenum	µg/kg	649	563,885	16	34,383	470	2,000	34,383	Scaled GWP SSL	No
100-B-19_Shallow_2	Selenium	µg/kg	1,280	9,013	16	550	780	200	780	Background Value	Yes
100-B-19_Shallow_4	Hexavalent Chromium	µg/kg	420	6,000 <sup>e</sup>	36	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-19_Shallow_4	Mercury	µg/kg	15	1.34E+07	36	373,079	13	200	373,079	Scaled GWP SSL	No
100-B-19_Shallow_5	Hexavalent Chromium	µg/kg	236	6,000 <sup>e</sup>	25	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-19_Shallow_5	Mercury	µg/kg	6,100	1.34E+07	25	532,971	13	200	532,971	Scaled GWP SSL	No
100-B-19_Shallow_5	Molybdenum	µg/kg	820	563,885	25	22,376	470	2,000	22,376	Scaled GWP SSL	No
100-B-19_Shallow_Focused	Antimony	µg/kg	1,500	1.19E+07	219	54,328	130	600	54,328	Scaled GWP SSL	No
100-B-19_Shallow_Focused	Barium	µg/kg	173,000	3.89E+08	219	1.78E+06	132,000	2,000	1,776,256	Scaled GWP SSL	No
100-B-19_Shallow_Focused	Copper	µg/kg	22,800	7.69E+06	219	35,112	22,000	1,000	35,112	Scaled GWP SSL	No
100-B-19_Shallow_Focused	Hexavalent Chromium	µg/kg	330	6,000 <sup>e</sup>	219	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-19_Shallow_Focused	Iron	µg/kg	3.96E+07	2.92E+08	219	1.34E+06	3.26E+07	—	32,600,000	Background Value	Yes
100-B-19_Shallow_Focused	Lead	µg/kg	17,400	— <sup>c</sup>	219	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-19_Shallow_Focused	Mercury	µg/kg	17,100	1.34E+07	219	61,328	13	200	61,328	Scaled GWP SSL	No
100-B-19_Shallow_Focused	Molybdenum	µg/kg	1,100	563,885	219	2,575	470	2,000	2,575	Scaled GWP SSL	No
100-B-19_Shallow_Focused	Vanadium	µg/kg	91,300	— <sup>c</sup>	219	— <sup>c</sup>	85,100	2,500	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Aroclor-1260	µg/kg	8.5	— <sup>c</sup>	3.2	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Benzo(a)anthracene	µg/kg	29	— <sup>c</sup>	3.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Benzo(a)pyrene	µg/kg	32	— <sup>c</sup>	3.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	35	— <sup>c</sup>	3.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	35	— <sup>c</sup>	3.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Chrysene	µg/kg	31	— <sup>c</sup>	3.2	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Copper	µg/kg	43,300	7.69E+06	3.2	2.40E+06	22,000	1,000	2,403,006	Scaled GWP SSL	No
100-B-20_Shallow_Focused	Di-n-butylphthalate	µg/kg	153	88,471	3.2	27,647	—	330	27,647	Scaled GWP SSL	No
100-B-20_Shallow_Focused	Fluoranthene	µg/kg	43	3.89E+08	3.2	1.22E+08	—	330	121,562,500	Scaled GWP SSL	No
100-B-20_Shallow_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	21	— <sup>c</sup>	3.2	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Lead	µg/kg	20,900	— <sup>c</sup>	3.2	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-20_Shallow_Focused	Mercury	µg/kg	327	1.34E+07	3.2	4.20E+06	13	200	4,197,144	Scaled GWP SSL	No
100-B-20_Shallow_Focused	Molybdenum	µg/kg	599	563,885	3.2	176,214	470	2,000	176,214	Scaled GWP SSL	No
100-B-20_Shallow_Focused	Pyrene	µg/kg	40	3.89E+08	3.2	1.22E+08	—	330	121,562,500	Scaled GWP SSL	No
100-B-20_Shallow_Focused	Zinc	µg/kg	326,000	3.89E+08	3.2	1.22E+08	67,800	1,000	121,562,500	Scaled GWP SSL	No
100-B-21:2_Shallow	Di-n-butylphthalate	µg/kg	22	88,471	33	2,681	—	330	2,681	Scaled GWP SSL	No
100-B-21:2_Shallow	Hexavalent Chromium	µg/kg	275	6,000 <sup>e</sup>	33	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-21:2_Shallow	Molybdenum	µg/kg	1,390	563,885	33	17,087	470	2,000	17,087	Scaled GWP SSL	No
100-B-21:2_Shallow	Pyrene	µg/kg	21	3.89E+08	33	1.18E+07	—	330	11,787,879	Scaled GWP SSL	No
100-B-21:2_Shallow	Silver	µg/kg	390	27,530	33	834	167	200	0,834	Scaled GWP SSL	No
100-B-21:3_Shallow	Antimony	µg/kg	369	1.19E+07	9.2	1.29E+06	130	600	1,293,242	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-21:3_Shallow	Benzo(a)anthracene	µg/kg	68	— <sup>c</sup>	9.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-21:3_Shallow	Benzo(a)pyrene	µg/kg	27	— <sup>c</sup>	9.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-21:3_Shallow	Benzo(b)fluoranthene	µg/kg	41	— <sup>c</sup>	9.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-21:3_Shallow	Benzo(k)fluoranthene	µg/kg	60	— <sup>c</sup>	9.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-21:3_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	22	— <sup>c</sup>	9.2	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-21:3_Shallow	Chrysene	µg/kg	86	— <sup>c</sup>	9.2	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-B-21:3_Shallow	Fluoranthene	µg/kg	120	3.89E+08	9.2	4.23E+07	—	330	42,282,609	Scaled GWP SSL	No
100-B-21:3_Shallow	Mercury	µg/kg	20	1.34E+07	9.2	1.46E+06	13	200	1,459,876	Scaled GWP SSL	No
100-B-21:3_Shallow	Pyrene	µg/kg	83	3.89E+08	9.2	4.23E+07	—	330	42,282,609	Scaled GWP SSL	No
100-B-21:3_Shallow	Europium-152	pCi/g	0.16	— <sup>c</sup>	9.2	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-21:4_Shallow	Antimony	µg/kg	866	1.19E+07	30	403,316	130	600	403,316	Scaled GWP SSL	No
100-B-21:4_Shallow	Chromium	µg/kg	32,036	— <sup>c</sup>	30	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
100-B-21:4_Shallow	Hexavalent Chromium	µg/kg	300	6,000 <sup>d</sup>	30	6,000	—	1,000	6,000	— <sup>d</sup>	No
100-B-21:4_Shallow	Mercury	µg/kg	47	1.34E+07	30	455,283	13	200	455,283	Scaled GWP SSL	No
100-B-21:4_Shallow	Molybdenum	µg/kg	494	563,885	30	19,115	470	2,000	19,115	Scaled GWP SSL	No
100-B-21:4_Shallow	Selenium	µg/kg	1,040	9,013	30	306	780	1,000	1,000	RDL	Yes
100-B-21:4_Shallow	Cesium-137	pCi/g	45	— <sup>c</sup>	30	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
100-B-21:4_Shallow	Cobalt-60	pCi/g	0.25	— <sup>c</sup>	30	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
100-B-21:4_Shallow	Europium-152	pCi/g	1.0	— <sup>c</sup>	30	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-21:4_Shallow	Plutonium-239/240	pCi/g	0.049	— <sup>c</sup>	30	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-21:4_Shallow	Total beta radiostrontium	pCi/g	1.4	2,121	30	72	0.18	1	0,072	Scaled GWP SSL	No
100-B-22:2_Shallow_Focused	Aluminum	µg/kg	1.19E+07	— <sup>c</sup>	126	— <sup>c</sup>	1.18E+07	—	—	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	Antimony	µg/kg	1,080	1.19E+07	126	94,203	130	600	94,203	Scaled GWP SSL	No
100-B-22:2_Shallow_Focused	Beryllium	µg/kg	1,700	— <sup>c</sup>	126	— <sup>c</sup>	1,510	500	—	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	Boron	µg/kg	9,230	348,488	126	2,759	3,890	2,000	3,890	Background Value	Yes
100-B-22:2_Shallow_Focused	Cadmium	µg/kg	1,020	1,256	126	9.9	1,510	50	1,510	Background Value	No
100-B-22:2_Shallow_Focused	Chromium	µg/kg	24,800	— <sup>c</sup>	126	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	Copper	µg/kg	66,700	7.69E+06	126	60,884	22,000	1,000	60,884	Scaled GWP SSL	Yes
100-B-22:2_Shallow_Focused	Hexavalent Chromium	µg/kg	402	6,000 <sup>d</sup>	126	6,000	—	1,000	6,000	— <sup>d</sup>	No
100-B-22:2_Shallow_Focused	Iron	µg/kg	4.43E+07	2.92E+08	126	2.32E+06	3.26E+07	—	32,600,000	Background Value	Yes
100-B-22:2_Shallow_Focused	Lead	µg/kg	125,000	— <sup>c</sup>	126	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-22:2_Shallow_Focused	Mercury	µg/kg	319	1.34E+07	126	106,341	13	200	106,341	Scaled GWP SSL	No
100-B-22:2_Shallow_Focused	Molybdenum	µg/kg	2,000	563,885	126	4,465	470	2,000	4,465	Scaled GWP SSL	No
100-B-22:2_Shallow_Focused	Nickel	µg/kg	21,300	3.89E+08	126	3.08E+06	19,100	4,000	3,079,968	Scaled GWP SSL	No
100-B-22:2_Shallow_Focused	Silver	µg/kg	1,960	27,530	126	218	167	200	0,218	Scaled GWP SSL	Yes
100-B-22:2_Shallow_Focused	Zinc	µg/kg	176,000	3.89E+08	126	3.08E+06	67,800	1,000	3,079,968	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Acenaphthene	µg/kg	200	84,728	1,238	68	—	330	330	RDL	No
100-B-23_Shallow_Focused	Anthracene	µg/kg	1,900	4.27E+07	1,238	34,477	—	330	34,477	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Antimony	µg/kg	270	1.19E+07	1,238	9,612	130	600	9,612	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Aroclor-1254	µg/kg	5.4	— <sup>c</sup>	1,238	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Aroclor-1260	µg/kg	21	— <sup>c</sup>	1,238	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Benzo(a)anthracene	µg/kg	490	— <sup>c</sup>	1,238	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Benzo(a)pyrene	µg/kg	220	— <sup>c</sup>	1,238	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	270	— <sup>c</sup>	1,238	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	290	— <sup>c</sup>	1,238	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	210	— <sup>c</sup>	1,238	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Boron	µg/kg	14,100	348,488	1,238	282	3,890	2,000	3,890	Background Value	Yes
100-B-23_Shallow_Focused	Butylbenzylphthalate	µg/kg	20	60,438	1,238	49	—	330	330	RDL	No
100-B-23_Shallow_Focused	Cadmium	µg/kg	1,700	1,256	1,238	1.0	1,510	50	1,510	Background Value	Yes
100-B-23_Shallow_Focused	Carbazole	µg/kg	370	537	1,238	0.43	—	330	330	RDL	Yes
100-B-23_Shallow_Focused	Chrysene	µg/kg	1,400	— <sup>c</sup>	1,238	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-B-23_Shallow_Focused	Dibenz[a,h]anthracene	µg/kg	50	— <sup>c</sup>	1,238	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-23_Shallow_Focused	Dibenzofuran	µg/kg	220	3,353	1,238	2.7	--	330	330	RD L	No
100-B-23_Shallow_Focused	Di-n-butylphthalate	µg/kg	31	88,471	1,238	71	--	330	330	RD L	No
100-B-23_Shallow_Focused	Fluoranthene	µg/kg	1,600	3.89E+08	1,238	314,267	--	330	314,267	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Fluorene	µg/kg	390	97,154	1,238	78	--	330	330	RD L	Yes
100-B-23_Shallow_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	83	-- <sup>c</sup>	1,238	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	Lead	µg/kg	73,800	-- <sup>c</sup>	1,238	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	Mercury	µg/kg	8,200	1.34E+07	1,238	10,851	13	200	10,851	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Molybdenum	µg/kg	710	563,885	1,238	456	470	2,000	2,000	RD L	No
100-B-23_Shallow_Focused	Pyrene	µg/kg	1,200	3.89E+08	1,238	314,267	--	330	314,267	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Strontium	µg/kg	25,100	3.89E+08	1,238	314,267	--	1,000	314,267	Scaled GWP SSL	No
100-B-23_Shallow_Focused	Tin	µg/kg	3,200	-- <sup>c</sup>	1,238	-- <sup>c</sup>	--	10,000	--	-- <sup>c</sup>	--
100-B-23_Shallow_Focused	Total petroleum hydrocarbons	µg/kg	173,000	1.00E+06 <sup>d</sup>	1,238	1000000	--	--	1,000,000	-- <sup>d</sup>	No
100-B-23_Shallow_Focused	Zinc	µg/kg	1.31E+06	3.89E+08	1,238	314,267	67,800	1,000	314,267	Scaled GWP SSL	Yes
100-B-25_Shallow	Hexavalent Chromium	µg/kg	164	6,000 <sup>e</sup>	48	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-25_Shallow	Mercury	µg/kg	44	1.34E+07	48	279,810	13	200	279,810	Scaled GWP SSL	No
100-B-25_Shallow	Europium-152	pCi/g	1.1	-- <sup>c</sup>	48	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
100-B-25_Shallow	Nickel-63	pCi/g	4.5	-- <sup>c</sup>	48	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
100-B-25_Shallow	Total beta radiostrontium	pCi/g	0.40	2,121	48	44	0.18	1	0,044	Scaled GWP SSL	No
100-B-26_Shallow_Focused	Chromium	µg/kg	39,300	-- <sup>c</sup>	32	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
100-B-26_Shallow_Focused	Hexavalent Chromium	µg/kg	2,020	6,000 <sup>e</sup>	32	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-26_Shallow_Focused	Lead	µg/kg	17,600	-- <sup>c</sup>	32	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-26_Shallow_Focused	Mercury	µg/kg	16	1.34E+07	32	423,686	13	200	423,686	Scaled GWP SSL	No
100-B-26_Shallow_Focused	Total U isotopes	µg/kg	3,513	-- <sup>f</sup>	32	-- <sup>f</sup>	3,210	--	--	--	--
100-B-26_Shallow_Focused	Zinc	µg/kg	108,000	3.89E+08	32	1.23E+07	67,800	1,000	12,271,293	Scaled GWP SSL	No
100-B-26_Shallow_Focused	Cesium-137	pCi/g	3.1	-- <sup>c</sup>	32	-- <sup>c</sup>	1.1	0.1	--	-- <sup>c</sup>	--
100-B-26_Shallow_Focused	Uranium-233/234	pCi/g	1.4	-- <sup>g</sup>	32	-- <sup>g</sup>	1.1	1	--	--	--
100-B-26_Shallow_Focused	Uranium-238	pCi/g	1.2	-- <sup>g</sup>	32	-- <sup>g</sup>	1.1	1	--	--	--
100-B-27_Deep	Aluminum	µg/kg	1.23E+07	-- <sup>c</sup>	47	-- <sup>c</sup>	1.18E+07	--	--	-- <sup>c</sup>	--
100-B-27_Deep	Antimony	µg/kg	464	1.19E+07	47	252,608	130	600	252,608	Scaled GWP SSL	No
100-B-27_Deep	Barium	µg/kg	149,745	3.89E+08	47	8.26E+06	132,000	2,000	8,259,023	Scaled GWP SSL	No
100-B-27_Deep	Copper	µg/kg	28,589	7.69E+06	47	163,262	22,000	1,000	163,262	Scaled GWP SSL	No
100-B-27_Deep	Hexavalent Chromium	µg/kg	215	6,000 <sup>e</sup>	47	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-27_Deep	Iron	µg/kg	3.61E+07	2.92E+08	47	6.21E+06	3.26E+07	--	32,600,000	Background Value	Yes
100-B-27_Deep	Manganese	µg/kg	525,815	3.89E+08	47	8.26E+06	512,000	5,000	8,259,023	Scaled GWP SSL	No
100-B-27_Deep	Molybdenum	µg/kg	471	563,885	47	11,972	470	2,000	11,972	Scaled GWP SSL	No
100-B-27_Deep	Silver	µg/kg	208	27,530	47	584	167	200	0,584	Scaled GWP SSL	No
100-B-27_Deep	Vanadium	µg/kg	86,865	-- <sup>c</sup>	47	-- <sup>c</sup>	85,100	2,500	--	-- <sup>c</sup>	--
100-B-27_Deep	Zinc	µg/kg	69,869	3.89E+08	47	8.26E+06	67,800	1,000	8,259,023	Scaled GWP SSL	No
100-B-28_Shallow_1	Boron	µg/kg	5,012	348,488	25	13,996	3,890	2,000	13,996	Scaled GWP SSL	No
100-B-28_Shallow_1	Hexavalent Chromium	µg/kg	330	6,000 <sup>e</sup>	25	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-28_Shallow_1	Mercury	µg/kg	76	1.34E+07	25	539,392	13	200	539,392	Scaled GWP SSL	No
100-B-28_Shallow_1	Molybdenum	µg/kg	521	563,885	25	22,646	470	2,000	22,646	Scaled GWP SSL	No
100-B-28_Shallow_3	Hexavalent Chromium	µg/kg	200	6,000 <sup>e</sup>	19	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-28_Shallow_3	Manganese	µg/kg	524,239	3.89E+08	19	2.02E+07	512,000	5,000	20,155,440	Scaled GWP SSL	No
100-B-28_Shallow_3	Mercury	µg/kg	163	1.34E+07	19	695,900	13	200	695,900	Scaled GWP SSL	No
100-B-28_Shallow_3	Zinc	µg/kg	572,012	3.89E+08	19	2.02E+07	67,800	1,000	20,155,440	Scaled GWP SSL	No
100-B-28_Shallow_5	Antimony	µg/kg	899	1.19E+07	22	540,810	130	600	540,810	Scaled GWP SSL	No
100-B-28_Shallow_5	Chromium	µg/kg	19,369	-- <sup>c</sup>	22	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
100-B-28_Shallow_5	Hexavalent Chromium	µg/kg	190	6,000 <sup>e</sup>	22	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-28_Shallow_5	Lead	µg/kg	12,508	-- <sup>c</sup>	22	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-28_Shallow_5	Mercury	µg/kg	77	1.34E+07	22	610,494	13	200	610,494	Scaled GWP SSL	No
100-B-28_Shallow_5	Molybdenum	µg/kg	775	563,885	22	25,631	470	2,000	25,631	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Aluminum	µg/kg	1.85E+07	-- <sup>c</sup>	151	-- <sup>c</sup>	1.18E+07	--	--	-- <sup>c</sup>	--



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-28_Shallow_Focused	Anthracene	µg/kg	1.9	4.27E+07	151	283,372	--	330	283,372	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Antimony	µg/kg	1,000	1.19E+07	151	79,003	130	600	79,003	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Benzo(a)anthracene	µg/kg	47	-- <sup>c</sup>	151	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Benzo(a)pyrene	µg/kg	60	-- <sup>c</sup>	151	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	82	-- <sup>c</sup>	151	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	31	-- <sup>c</sup>	151	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Chromium	µg/kg	50,100	-- <sup>c</sup>	151	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Chrysene	µg/kg	37	-- <sup>c</sup>	151	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Copper	µg/kg	31,000	7.69E+06	151	51,060	22,000	1,000	51,060	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Dibenz[a,h]anthracene	µg/kg	8.0	-- <sup>c</sup>	151	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Fluoranthene	µg/kg	101	3.89E+08	151	2.58E+06	--	330	2,583,001	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Fluorene	µg/kg	1.0	97,154	151	645	--	330	0,645	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Hexavalent Chromium	µg/kg	280	6,000 <sup>e</sup>	151	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-28_Shallow_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	48	-- <sup>c</sup>	151	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Iron	µg/kg	3.69E+07	2.92E+08	151	1.94E+06	3.26E+07	--	32,600,000	Background Value	Yes
100-B-28_Shallow_Focused	Lead	µg/kg	12,700	-- <sup>c</sup>	151	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Mercury	µg/kg	804	1.34E+07	151	89,182	13	200	89,182	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Molybdenum	µg/kg	566	563,885	151	3,744	470	2,000	3,744	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Pyrene	µg/kg	34	3.89E+08	151	2.58E+06	--	330	2,583,001	Scaled GWP SSL	No
100-B-28_Shallow_Focused	Vanadium	µg/kg	106,000	-- <sup>c</sup>	151	-- <sup>c</sup>	85,100	2,500	--	-- <sup>c</sup>	--
100-B-28_Shallow_Focused	Zinc	µg/kg	81,700	3.89E+08	151	2.58E+06	67,800	1,000	2,583,001	Scaled GWP SSL	No
100-B-31_Shallow	Antimony	µg/kg	1,096	1.19E+07	15	787,936	130	600	787,936	Scaled GWP SSL	No
100-B-31_Shallow	Copper	µg/kg	30,009	7.69E+06	15	509,246	22,000	1,000	509,246	Scaled GWP SSL	No
100-B-31_Shallow	Hexavalent Chromium	µg/kg	173	6,000 <sup>e</sup>	15	6,000	--	1,000	6,000	-- <sup>e</sup>	No
100-B-31_Shallow	Lead	µg/kg	78,974	-- <sup>c</sup>	15	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-31_Shallow	Mercury	µg/kg	112	1.34E+07	15	889,461	13	200	889,461	Scaled GWP SSL	No
100-B-31_Shallow	Molybdenum	µg/kg	4,483	563,885	15	37,343	470	2,000	37,343	Scaled GWP SSL	No
100-B-31_Shallow	Selenium	µg/kg	856	9,013	15	597	780	1,000	1,000	RDL	No
100-B-33_Shallow_Focused	Boron	µg/kg	4,670	348,488	4.2	82,973	3,890	2,000	82,973	Scaled GWP SSL	No
100-B-33_Shallow_Focused	Selenium	µg/kg	898	9,013	4.2	2,146	780	1,000	2,146	Scaled GWP SSL	No
100-B-33_Shallow_Focused	Europium-152	pCi/g	0.13	-- <sup>c</sup>	4.2	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	Aluminum	µg/kg	1.39E+07	-- <sup>c</sup>	22	-- <sup>c</sup>	1.18E+07	--	--	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	Antimony	µg/kg	1,300	1.19E+07	22	535,938	130	600	535,938	Scaled GWP SSL	No
100-B-35:1_Deep_Focused	Aroclor-1260	µg/kg	26	-- <sup>c</sup>	22	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	Copper	µg/kg	23,200	7.69E+06	22	346,379	22,000	1,000	346,379	Scaled GWP SSL	No
100-B-35:1_Deep_Focused	Lead	µg/kg	12,200	-- <sup>c</sup>	22	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-B-35:1_Deep_Focused	Total petroleum hydrocarbons - diesel range	µg/kg	55,000	2.00E+06 <sup>d</sup>	22	2000000	--	--	2,000,000	-- <sup>d</sup>	No
100-B-35:1_Deep_Focused	Total petroleum hydrocarbons - diesel range extended to C36	µg/kg	58,000	2.00E+06 <sup>d</sup>	22	2000000	--	--	2,000,000	-- <sup>d</sup>	No
100-B-35:1_Shallow	Antimony	µg/kg	1,061	1.19E+07	122	97,523	130	600	97,523	Scaled GWP SSL	No
100-B-35:1_Shallow	Aroclor-1254	µg/kg	7.4	-- <sup>c</sup>	122	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Aroclor-1260	µg/kg	3.0	-- <sup>c</sup>	122	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Benzo(a)anthracene	µg/kg	15	-- <sup>c</sup>	122	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Benzo(a)pyrene	µg/kg	17	-- <sup>c</sup>	122	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Benzo(b)fluoranthene	µg/kg	65	-- <sup>c</sup>	122	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Benzo(k)fluoranthene	µg/kg	10	-- <sup>c</sup>	122	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Chrysene	µg/kg	13	-- <sup>c</sup>	122	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Fluoranthene	µg/kg	17	3.89E+08	122	3.19E+06	--	330	3,188,525	Scaled GWP SSL	No
100-B-35:1_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	26	-- <sup>c</sup>	122	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-B-35:1_Shallow	Mercury	µg/kg	14	1.34E+07	122	110,089	13	200	110,089	Scaled GWP SSL	No
100-B-35:1_Shallow	Pyrene	µg/kg	15	3.89E+08	122	3.19E+06	--	330	3,188,525	Scaled GWP SSL	No
100-B-35:1_Shallow	Total petroleum hydrocarbons - diesel range	µg/kg	9,369	2.00E+06 <sup>d</sup>	122	2000000	--	--	2,000,000	-- <sup>d</sup>	No
100-B-35:1_Shallow	Total petroleum hydrocarbons - diesel range extended to C36	µg/kg	11,859	2.00E+06 <sup>d</sup>	122	2000000	--	--	2,000,000	-- <sup>d</sup>	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater  
(With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu\text{g}}{\text{kg}} \cdot \text{m}$ or $\frac{\text{pCi}}{\text{g}} \cdot \text{m}$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Hanford Site 90th Percentile Background Value ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Required Detection Limit ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Selected GWP SSL ( $\mu\text{g}/\text{kg}$ or $\text{pCi}/\text{g}$ )	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-35:2_Shallow_Focused	Antimony	$\mu\text{g}/\text{kg}$	3,570	1.19E+07	16	748,291	130	600	748,291	Scaled GWP SSL	No
100-B-35:2_Shallow_Focused	Aroclor-1260	$\mu\text{g}/\text{kg}$	42	— <sup>c</sup>	16	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Benzo(a)anthracene	$\mu\text{g}/\text{kg}$	67	— <sup>c</sup>	16	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Benzo(a)pyrene	$\mu\text{g}/\text{kg}$	77	— <sup>c</sup>	16	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Benzo(b)fluoranthene	$\mu\text{g}/\text{kg}$	74	— <sup>c</sup>	16	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Benzo(k)fluoranthene	$\mu\text{g}/\text{kg}$	41	— <sup>c</sup>	16	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Chrysene	$\mu\text{g}/\text{kg}$	54	— <sup>c</sup>	16	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Dibenz[a,h]anthracene	$\mu\text{g}/\text{kg}$	7.7	— <sup>c</sup>	16	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Fluoranthene	$\mu\text{g}/\text{kg}$	63	3.89E+08	16	2.45E+07	—	330	24,465,409	Scaled GWP SSL	No
100-B-35:2_Shallow_Focused	Indeno(1,2,3-cd)pyrene	$\mu\text{g}/\text{kg}$	63	— <sup>c</sup>	16	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Lead	$\mu\text{g}/\text{kg}$	12,700	— <sup>c</sup>	16	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-35:2_Shallow_Focused	Pyrene	$\mu\text{g}/\text{kg}$	62	3.89E+08	16	2.45E+07	—	330	24,465,409	Scaled GWP SSL	No
100-B-35:2_Shallow_Focused	Silver	$\mu\text{g}/\text{kg}$	569	27,530	16	1,731	167	200	1,731	Scaled GWP SSL	No
100-B-35:2_Shallow_Focused	Total petroleum hydrocarbons - diesel range	$\mu\text{g}/\text{kg}$	3,580	2.00E+06 <sup>d</sup>	16	2000000	—	—	2,000,000	— <sup>d</sup>	No
100-B-35:2_Shallow_Focused	Total petroleum hydrocarbons - motor oil (high boiling)	$\mu\text{g}/\text{kg}$	19,300	2.00E+06 <sup>d</sup>	16	2000000	—	—	2,000,000	— <sup>d</sup>	No
100-B-35:2_Shallow_Focused	Zinc	$\mu\text{g}/\text{kg}$	158,000	3.89E+08	16	2.45E+07	67,800	1,000	24,465,409	Scaled GWP SSL	No
100-B-5_Deep	Chromium	$\mu\text{g}/\text{kg}$	297,000	— <sup>c</sup>	28	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
100-B-5_Deep	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	1,940	6,000 <sup>e</sup>	28	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-5_Deep	Mercury	$\mu\text{g}/\text{kg}$	5,040	1.34E+07	28	486,625	13	200	486,625	Scaled GWP SSL	No
100-B-5_Deep	Americium-241	$\text{pCi}/\text{g}$	0.97	— <sup>c</sup>	28	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
100-B-5_Deep	Cesium-137	$\text{pCi}/\text{g}$	22	— <sup>c</sup>	28	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
100-B-5_Deep	Cobalt-60	$\text{pCi}/\text{g}$	1.5	— <sup>c</sup>	28	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
100-B-5_Deep	Europium-152	$\text{pCi}/\text{g}$	15	— <sup>c</sup>	28	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-5_Deep	Europium-154	$\text{pCi}/\text{g}$	1.4	— <sup>c</sup>	28	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
100-B-5_Deep	Plutonium-238	$\text{pCi}/\text{g}$	0.26	— <sup>c</sup>	28	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
100-B-5_Deep	Plutonium-239/240	$\text{pCi}/\text{g}$	3.4	— <sup>c</sup>	28	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-5_Deep	Total beta radiostrontium	$\text{pCi}/\text{g}$	1.9	2,121	28	77	0.18	1	0,077	Scaled GWP SSL	No
100-B-5_Shallow	Mercury	$\mu\text{g}/\text{kg}$	17	1.34E+07	52	257,296	13	200	257,296	Scaled GWP SSL	No
100-B-5_Shallow	Americium-241	$\text{pCi}/\text{g}$	0.11	— <sup>c</sup>	52	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
100-B-5_Shallow	Plutonium-239/240	$\text{pCi}/\text{g}$	0.35	— <sup>c</sup>	52	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-8:1_Deep	Chromium	$\mu\text{g}/\text{kg}$	55,800	— <sup>c</sup>	29	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
100-B-8:1_Deep	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	483	6,000 <sup>e</sup>	29	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-8:1_Deep	Mercury	$\mu\text{g}/\text{kg}$	237	1.34E+07	29	464,736	13	200	464,736	Scaled GWP SSL	No
100-B-8:1_Deep	Americium-241	$\text{pCi}/\text{g}$	0.44	— <sup>c</sup>	29	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
100-B-8:1_Deep	Cesium-137	$\text{pCi}/\text{g}$	9.6	— <sup>c</sup>	29	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
100-B-8:1_Deep	Cobalt-60	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	29	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
100-B-8:1_Deep	Europium-152	$\text{pCi}/\text{g}$	2.7	— <sup>c</sup>	29	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-8:1_Deep	Europium-154	$\text{pCi}/\text{g}$	0.16	— <sup>c</sup>	29	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
100-B-8:1_Deep	Plutonium-239/240	$\text{pCi}/\text{g}$	0.75	— <sup>c</sup>	29	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-8:1_Deep	Total beta radiostrontium	$\text{pCi}/\text{g}$	2.3	2,121	29	73	0.18	1	0,073	Scaled GWP SSL	No
100-B-8:1_Shallow	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	286	6,000 <sup>e</sup>	49	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-8:1_Shallow	Lead	$\mu\text{g}/\text{kg}$	37,866	— <sup>c</sup>	49	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-B-8:1_Shallow	Mercury	$\mu\text{g}/\text{kg}$	48	1.34E+07	49	276,355	13	200	276,355	Scaled GWP SSL	No
100-B-8:1_Shallow	Europium-152	$\text{pCi}/\text{g}$	0.29	— <sup>c</sup>	49	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-8:1_Shallow	Plutonium-239/240	$\text{pCi}/\text{g}$	0.069	— <sup>c</sup>	49	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-8:1_Shallow	Total beta radiostrontium	$\text{pCi}/\text{g}$	0.32	2,121	49	44	0.18	1	0,044	Scaled GWP SSL	No
100-B-8:2_Deep	Chromium	$\mu\text{g}/\text{kg}$	65,806	— <sup>c</sup>	19	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
100-B-8:2_Deep	Hexavalent Chromium	$\mu\text{g}/\text{kg}$	1,989	6,000 <sup>e</sup>	19	6,000	—	1,000	6,000	— <sup>e</sup>	No
100-B-8:2_Deep	Mercury	$\mu\text{g}/\text{kg}$	145	1.34E+07	19	699,524	13	200	699,524	Scaled GWP SSL	No
100-B-8:2_Deep	Americium-241	$\text{pCi}/\text{g}$	1.1	— <sup>c</sup>	19	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater  
(With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-8:2_Deep	Cesium-137	pCi/g	13	— <sup>c</sup>	19	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
100-B-8:2_Deep	Cobalt-60	pCi/g	0.56	— <sup>c</sup>	19	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
100-B-8:2_Deep	Europium-152	pCi/g	5.1	— <sup>c</sup>	19	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-8:2_Deep	Europium-154	pCi/g	0.99	— <sup>c</sup>	19	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
100-B-8:2_Deep	Plutonium-239/240	pCi/g	0.76	— <sup>c</sup>	19	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-8:2_Deep	Total beta radiostrontium	pCi/g	2.7	2,121	19	110	0.18	1	0,110	Scaled GWP SSL	No
100-B-8:2_Shallow_1	Hexavalent Chromium	µg/kg	555	6,000 <sup>e</sup>	31	6,000	—	1,000	6,000	— <sup>a</sup>	No
100-B-8:2_Shallow_1	Mercury	µg/kg	23	1.34E+07	31	434,656	13	200	434,656	Scaled GWP SSL	No
100-B-8:2_Shallow_1	Americium-241	pCi/g	0.28	— <sup>c</sup>	31	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Cobalt-60	pCi/g	0.095	— <sup>c</sup>	31	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Europium-152	pCi/g	0.32	— <sup>c</sup>	31	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Europium-154	pCi/g	0.38	— <sup>c</sup>	31	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Plutonium-239/240	pCi/g	0.36	— <sup>c</sup>	31	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
100-B-8:2_Shallow_1	Total beta radiostrontium	pCi/g	1.6	2,121	31	69	0.18	1	0,069	Scaled GWP SSL	No
100-B-8:2_Shallow_3	Europium-152	pCi/g	0.56	— <sup>c</sup>	50	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
100-B-8:2_Shallow_3	Nickel-63	pCi/g	3.6	— <sup>c</sup>	50	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
100-B-8:2_Shallow_3	Total beta radiostrontium	pCi/g	1.8	2,121	50	43	0.18	1	0,043	Scaled GWP SSL	No
100-C-3_Shallow	Acetone	µg/kg	3.2	17,372	8.6	2,020	—	20	2,020	Scaled GWP SSL	No
100-C-3_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	269	— <sup>c</sup>	8.6	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
100-C-3_Shallow	Methylene chloride	µg/kg	16	14	8.6	1.6	—	5	5	RDL	Yes
100-C-3_Shallow	Toluene	µg/kg	9.1	4,437	8.6	516	—	5	0,516	Scaled GWP SSL	No
100-C-7_Shallow_1	Mercury	µg/kg	179	1.34E+07	36	376,215	13	200	376,215	Scaled GWP SSL	No
100-C-7:1_Shallow_1	Mercury	µg/kg	24	1.34E+07	55	242,434	13	200	242,434	Scaled GWP SSL	No
100-C-7:1_Shallow_2	Hexavalent Chromium	µg/kg	620	6,000 <sup>e</sup>	52	6,000	—	1,000	6,000	— <sup>a</sup>	No
100-C-7:1_Shallow_3	Molybdenum	µg/kg	645	563,885	104	5,448	470	2,000	5,448	Scaled GWP SSL	No
100-C-9:1_Deep_Focused	Antimony	µg/kg	430	1.19E+07	2.0	5.95E+06	130	600	5,948,913	Scaled GWP SSL	No
100-C-9:1_Deep_Focused	Beryllium	µg/kg	1,800	— <sup>c</sup>	2.0	— <sup>c</sup>	1,510	500	—	— <sup>c</sup>	—
100-C-9:1_Deep_Focused	Copper	µg/kg	37,300	7.69E+06	2.0	3.84E+06	22,000	1,000	3,844,810	Scaled GWP SSL	No
100-C-9:1_Deep_Focused	Hexavalent Chromium	µg/kg	1,700	6,000 <sup>e</sup>	2.0	6,000	—	1,000	6,000	— <sup>a</sup>	No
100-C-9:1_Deep_Focused	Lead	µg/kg	15,300	— <sup>c</sup>	2.0	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
100-C-9:1_Deep_Focused	Mercury	µg/kg	2,900	1.34E+07	2.0	6.72E+06	13	200	6,715,431	Scaled GWP SSL	No
100-C-9:1_Deep_Focused	Molybdenum	µg/kg	620	563,885	2.0	281,942	470	2,000	281,942	Scaled GWP SSL	No
100-C-9:1_Deep_Focused	Strontium	µg/kg	18,200	3.89E+08	2.0	1.95E+08	—	1,000	194,500,000	Scaled GWP SSL	No
100-C-9:1_Deep_Focused	Tin	µg/kg	4,500	— <sup>c</sup>	2.0	— <sup>c</sup>	—	10,000	—	— <sup>c</sup>	—
100-C-9:1_Shallow_1	Antimony	µg/kg	470	1.19E+07	112	106,231	130	600	106,231	Scaled GWP SSL	No
100-C-9:1_Shallow_1	Hexavalent Chromium	µg/kg	421	6,000 <sup>e</sup>	112	6,000	—	1,000	6,000	— <sup>a</sup>	No
100-C-9:1_Shallow_1	Mercury	µg/kg	44	1.34E+07	112	119,918	13	200	119,918	Scaled GWP SSL	No
100-C-9:1_Shallow_2	Antimony	µg/kg	513	1.19E+07	26	455,855	130	600	455,855	Scaled GWP SSL	No
100-C-9:1_Shallow_2	Hexavalent Chromium	µg/kg	426	6,000 <sup>e</sup>	26	6,000	—	1,000	6,000	— <sup>a</sup>	No
100-C-9:1_Shallow_2	Mercury	µg/kg	1,886	1.34E+07	26	514,592	13	200	514,592	Scaled GWP SSL	No
100-C-9:1_Shallow_2	Strontium	µg/kg	28,900	3.89E+08	26	1.49E+07	—	1,000	14,904,215	Scaled GWP SSL	No
100-C-9:1_Shallow_2	Tin	µg/kg	3,100	— <sup>c</sup>	26	— <sup>c</sup>	—	10,000	—	— <sup>c</sup>	—
100-C-9:1_Shallow_Focused	Barium	µg/kg	162,000	3.89E+08	349	1.12E+06	132,000	2,000	1,115,572	Scaled GWP SSL	No
100-C-9:1_Shallow_Focused	Hexavalent Chromium	µg/kg	396	6,000 <sup>e</sup>	349	6,000	—	1,000	6,000	— <sup>a</sup>	No
100-C-9:2_Shallow	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	1.2	— <sup>c</sup>	12	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Aroclor-1254	µg/kg	21	— <sup>c</sup>	12	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Benzo(a)anthracene	µg/kg	41	— <sup>c</sup>	12	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Benzo(a)pyrene	µg/kg	48	— <sup>c</sup>	12	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Benzo(b)fluoranthene	µg/kg	41	— <sup>c</sup>	12	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Benzo(k)fluoranthene	µg/kg	45	— <sup>c</sup>	12	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Chrysene	µg/kg	55	— <sup>c</sup>	12	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
100-C-9:2_Shallow	Dieldrin	µg/kg	1.7	166	12	14	—	3.3	0,014	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-C-9:2_Shallow	Fluoranthene	µg/kg	81	3.89E+08	12	3.32E+07	--	330	33,247,863	Scaled GWP SSL	No
100-C-9:2_Shallow	Hexavalent Chromium	µg/kg	324	6,000 <sup>c</sup>	12	6,000	--	1,000	6,000	-- <sup>a</sup>	No
100-C-9:2_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	29	-- <sup>c</sup>	12	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-C-9:2_Shallow	Lead	µg/kg	13,131	-- <sup>c</sup>	12	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-C-9:2_Shallow	Mercury	µg/kg	40	1.34E+07	12	1.15E+06	13	200	1,147,937	Scaled GWP SSL	No
100-C-9:2_Shallow	Pyrene	µg/kg	94	3.89E+08	12	3.32E+07	--	330	33,247,863	Scaled GWP SSL	No
100-C-9:2_Shallow	Strontium	µg/kg	22,407	3.89E+08	12	3.32E+07	--	1,000	33,247,863	Scaled GWP SSL	No
100-C-9:2_Shallow	Zinc	µg/kg	263,884	3.89E+08	12	3.32E+07	67,800	1,000	33,247,863	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	4,4'-DDD (Dichlorodiphenyldichloroethane)	µg/kg	3.5	836,540	15	56,523	--	3.3	56,523	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	14	-- <sup>c</sup>	15	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	5.1	-- <sup>c</sup>	15	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Antimony	µg/kg	970	1.19E+07	15	803,907	130	600	803,907	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Aroclor-1254	µg/kg	120	-- <sup>c</sup>	15	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Aroclor-1260	µg/kg	11	-- <sup>c</sup>	15	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Benzo(a)pyrene	µg/kg	22	-- <sup>c</sup>	15	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	73	-- <sup>c</sup>	15	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	23	-- <sup>c</sup>	15	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	250	-- <sup>c</sup>	15	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Boron	µg/kg	5,100	348,488	15	23,546	3,890	2,000	23,546	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Chlordane	µg/kg	1.6	1.42E+06	15	96,016	--	1.7	96,016	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Chrysene	µg/kg	82	-- <sup>c</sup>	15	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Copper	µg/kg	66,100	7.69E+06	15	519,569	22,000	1,000	519,569	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Di-n-butylphthalate	µg/kg	40	88,471	15	5,978	--	330	5,978	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Endosulfan I	µg/kg	0.64	7,192	15	486	--	3	0,486	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Endrin	µg/kg	3.6	1,219	15	82	--	3	0,082	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Hexavalent Chromium	µg/kg	830	6,000 <sup>c</sup>	15	6,000	--	1,000	6,000	-- <sup>a</sup>	No
100-C-9:2_Shallow_Focused	Lead	µg/kg	152,000	-- <sup>c</sup>	15	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Mercury	µg/kg	850	1.34E+07	15	907,491	13	200	907,491	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Methoxychlor	µg/kg	7.3	-- <sup>c</sup>	15	-- <sup>c</sup>	--	20	--	-- <sup>c</sup>	--
100-C-9:2_Shallow_Focused	Molybdenum	µg/kg	1,900	563,885	15	38,100	470	2,000	38,100	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Nickel	µg/kg	22,000	3.89E+08	15	2.63E+07	19,100	4,000	26,283,784	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Strontium	µg/kg	32,700	3.89E+08	15	2.63E+07	--	1,000	26,283,784	Scaled GWP SSL	No
100-C-9:2_Shallow_Focused	Zinc	µg/kg	111,000	3.89E+08	15	2.63E+07	67,800	1,000	26,283,784	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	2-Methylnaphthalene	µg/kg	1,100	2,896	2.0	1,448	--	330	1,448	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Acenaphthene	µg/kg	6,800	84,728	2.0	42,364	--	330	42,364	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Anthracene	µg/kg	13,000	4.27E+07	2.0	2.13E+07	--	330	21,337,912	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Antimony	µg/kg	2,100	1.19E+07	2.0	5.95E+06	130	600	5,948,913	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Benzo(a)anthracene	µg/kg	20,000	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Benzo(a)pyrene	µg/kg	13,000	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Benzo(b)fluoranthene	µg/kg	11,000	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Benzo(k)fluoranthene	µg/kg	12,000	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Carbazole	µg/kg	7,300	537	2.0	268	--	330	330	RDL	Yes
100-C-9:3_Deep_Focused	Chrysene	µg/kg	20,000	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Dibenz[a,h]anthracene	µg/kg	2,200	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Dibenzofuran	µg/kg	3,000	3,353	2.0	1,677	--	330	1,677	Scaled GWP SSL	Yes
100-C-9:3_Deep_Focused	Fluoranthene	µg/kg	52,000	3.89E+08	2.0	1.95E+08	--	330	194,500,000	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Fluorene	µg/kg	5,800	97,154	2.0	48,577	--	330	48,577	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Hexavalent Chromium	µg/kg	610	6,000 <sup>c</sup>	2.0	6,000	--	1,000	6,000	-- <sup>a</sup>	No
100-C-9:3_Deep_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	5,600	-- <sup>c</sup>	2.0	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
100-C-9:3_Deep_Focused	Isophorone	µg/kg	280	178	2.0	89	--	330	330	RDL	No
100-C-9:3_Deep_Focused	Molybdenum	µg/kg	640	563,885	2.0	281,942	470	2,000	281,942	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Naphthalene	µg/kg	2,100	6,798	2.0	3,399	--	330	3,399	Scaled GWP SSL	No
100-C-9:3_Deep_Focused	Pyrene	µg/kg	35,000	3.89E+08	2.0	1.95E+08	--	330	194,500,000	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg · m or pCi · m)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-1_Deep	Hexavalent Chromium	µg/kg	363	6,000 <sup>e</sup>	20	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-1_Deep	Mercury	µg/kg	20	1.34E+07	20	671,543	13	200	671,543	Scaled GWP SSL	No
116-B-1_Deep	Americium-241	pCi/g	0.052	— <sup>c</sup>	20	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-1_Deep	Cesium-137	pCi/g	3.1	— <sup>c</sup>	20	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-1_Deep	Cobalt-60	pCi/g	0.17	— <sup>c</sup>	20	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-1_Deep	Europium-152	pCi/g	7.1	— <sup>c</sup>	20	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-1_Deep	Europium-154	pCi/g	0.36	— <sup>c</sup>	20	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-B-1_Deep	Plutonium-239/240	pCi/g	0.22	— <sup>c</sup>	20	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-1_Deep	Total beta radiostromtium	pCi/g	1.4	2,121	20	106	0.18	1	0,106	Scaled GWP SSL	No
116-B-1_Deep	Uranium-234	pCi/g	1.1	— <sup>e</sup>	20	— <sup>e</sup>	1.1	1	—	—	—
116-B-1_Shallow	Hexavalent Chromium	µg/kg	1,613	6,000 <sup>e</sup>	11	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-1_Shallow	Mercury	µg/kg	19	1.34E+07	11	1.24E+06	13	200	1,243,598	Scaled GWP SSL	No
116-B-1_Shallow	Cobalt-60	pCi/g	0.11	— <sup>c</sup>	11	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-1_Shallow	Europium-152	pCi/g	0.75	— <sup>c</sup>	11	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-1_Shallow	Europium-154	pCi/g	0.18	— <sup>c</sup>	11	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-B-1_Shallow	Plutonium-239/240	pCi/g	0.031	— <sup>c</sup>	11	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-10_Shallow	Chromium	µg/kg	23,800	— <sup>c</sup>	8.4	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-10_Shallow	Mercury	µg/kg	1,300	1.34E+07	8.4	1.60E+06	13	200	1,598,912	Scaled GWP SSL	No
116-B-10_Shallow	Cobalt-60	pCi/g	0.080	— <sup>c</sup>	8.4	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-10_Shallow	Europium-152	pCi/g	0.053	— <sup>c</sup>	8.4	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-11_Deep	Chromium	µg/kg	231,428	— <sup>c</sup>	86	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-11_Deep	Hexavalent Chromium	µg/kg	1,226	6,000 <sup>e</sup>	86	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-11_Deep	Lead	µg/kg	11,745	— <sup>c</sup>	86	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-B-11_Deep	Mercury	µg/kg	5,251	1.34E+07	86	156,719	13	200	156,719	Scaled GWP SSL	No
116-B-11_Deep	Total_U_Isotopes	µg/kg	4,297	— <sup>f</sup>	86	— <sup>f</sup>	3,210	—	—	—	—
116-B-11_Deep	Americium-241	pCi/g	5.1	— <sup>c</sup>	86	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-11_Deep	Cesium-137	pCi/g	122	— <sup>c</sup>	86	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-11_Deep	Cobalt-60	pCi/g	40	— <sup>c</sup>	86	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-11_Deep	Europium-152	pCi/g	325	— <sup>c</sup>	86	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-11_Deep	Europium-154	pCi/g	42	— <sup>c</sup>	86	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-B-11_Deep	Europium-155	pCi/g	2.2	— <sup>c</sup>	86	— <sup>c</sup>	0.054	0.1	—	— <sup>c</sup>	—
116-B-11_Deep	Nickel-63	pCi/g	2,702	— <sup>c</sup>	86	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-B-11_Deep	Plutonium-238	pCi/g	0.76	— <sup>c</sup>	86	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
116-B-11_Deep	Plutonium-239/240	pCi/g	19	— <sup>c</sup>	86	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-11_Deep	Total beta radiostromtium	pCi/g	4.8	2,121	86	25	0.18	1	0,025	Scaled GWP SSL	No
116-B-11_Deep	Uranium-234	pCi/g	1.6	— <sup>e</sup>	86	— <sup>e</sup>	1.1	1	—	—	—
116-B-11_Deep	Uranium-238	pCi/g	1.4	— <sup>e</sup>	86	— <sup>e</sup>	1.1	1	—	—	—
116-B-11_Shallow	Hexavalent Chromium	µg/kg	1,670	6,000 <sup>e</sup>	6.8	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-11_Shallow	Mercury	µg/kg	121	1.34E+07	6.8	1.98E+06	13	200	1,975,127	Scaled GWP SSL	No
116-B-11_Shallow	Total_U_Isotopes	µg/kg	3,928	— <sup>f</sup>	6.8	— <sup>f</sup>	3,210	—	—	—	—
116-B-11_Shallow	Americium-241	pCi/g	0.094	— <sup>c</sup>	6.8	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-11_Shallow	Cobalt-60	pCi/g	0.28	— <sup>c</sup>	6.8	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-11_Shallow	Europium-152	pCi/g	1.9	— <sup>c</sup>	6.8	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-11_Shallow	Nickel-63	pCi/g	22	— <sup>c</sup>	6.8	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-B-11_Shallow	Plutonium-239/240	pCi/g	0.069	— <sup>c</sup>	6.8	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-11_Shallow	Total beta radiostromtium	pCi/g	0.34	2,121	6.8	312	0.18	1	0,312	Scaled GWP SSL	No
116-B-11_Shallow	Uranium-234	pCi/g	1.3	— <sup>e</sup>	6.8	— <sup>e</sup>	1.1	1	—	—	—
116-B-11_Shallow	Uranium-238	pCi/g	1.3	— <sup>e</sup>	6.8	— <sup>e</sup>	1.1	1	—	—	—
116-B-12_Deep	Hexavalent Chromium	µg/kg	860	6,000 <sup>e</sup>	15	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-13_Shallow	Mercury	µg/kg	20	1.34E+07	25	545,970	13	200	545,970	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-13_Shallow	Americium-241	pCi/g	0.49	— <sup>c</sup>	25	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-13_Shallow	Plutonium-239/240	pCi/g	0.043	— <sup>c</sup>	25	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-13_Shallow	Total beta radiostrontium	pCi/g	0.41	2,121	25	86	0.18	1	0,086	Scaled GWP SSL	No
116-B-14_Deep	Antimony	µg/kg	6,600	1.19E+07	3.6	3.30E+06	130	600	3,304,952	Scaled GWP SSL	No
116-B-14_Deep	Chromium	µg/kg	18,600	— <sup>c</sup>	3.6	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-14_Deep	Hexavalent Chromium	µg/kg	252	6,000 <sup>e</sup>	3.6	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-14_Deep	Mercury	µg/kg	18	1.34E+07	3.6	3.73E+06	13	200	3,730,795	Scaled GWP SSL	No
116-B-14_Deep	Cesium-137	pCi/g	5.9	— <sup>c</sup>	3.6	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-14_Deep	Europium-152	pCi/g	1.3	— <sup>c</sup>	3.6	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-14_Deep	Plutonium-239/240	pCi/g	0.10	— <sup>c</sup>	3.6	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-14_Deep	Total beta radiostrontium	pCi/g	1.5	2,121	3.6	589	0.18	1	0,589	Scaled GWP SSL	No
116-B-14_Shallow	Chromium	µg/kg	33,600	— <sup>c</sup>	3.4	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-14_Shallow	Hexavalent Chromium	µg/kg	297	6,000 <sup>e</sup>	3.4	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-14_Shallow	Lead	µg/kg	20,000	— <sup>c</sup>	3.4	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-B-14_Shallow	Mercury	µg/kg	30	1.34E+07	3.4	3.95E+06	13	200	3,950,253	Scaled GWP SSL	No
116-B-14_Shallow	Total_U_Isotopes	µg/kg	4,346	— <sup>f</sup>	3.4	— <sup>f</sup>	3,210	—	—	—	—
116-B-14_Shallow	Americium-241	pCi/g	0.26	— <sup>c</sup>	3.4	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-14_Shallow	Europium-152	pCi/g	4.4	— <sup>c</sup>	3.4	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-14_Shallow	Plutonium-239/240	pCi/g	0.37	— <sup>c</sup>	3.4	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-14_Shallow	Total beta radiostrontium	pCi/g	1.6	2,121	3.4	624	0.18	1	0,624	Scaled GWP SSL	No
116-B-14_Shallow	Uranium-234	pCi/g	1.5	— <sup>g</sup>	3.4	— <sup>g</sup>	1.1	1	—	—	—
116-B-14_Shallow	Uranium-238	pCi/g	1.5	— <sup>g</sup>	3.4	— <sup>g</sup>	1.1	1	—	—	—
116-B-15_Shallow_Focused	Nickel-63	pCi/g	21	— <sup>c</sup>	18	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-B-2_Deep	Americium-241	pCi/g	0.11	— <sup>c</sup>	15	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-2_Deep	Cesium-137	pCi/g	47	— <sup>c</sup>	15	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-2_Deep	Cobalt-60	pCi/g	0.023	— <sup>c</sup>	15	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-2_Deep	Europium-152	pCi/g	0.60	— <sup>c</sup>	15	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-2_Deep	Plutonium-239/240	pCi/g	0.59	— <sup>c</sup>	15	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-2_Deep	Total beta radiostrontium	pCi/g	7.2	2,121	15	142	0.18	1	0,142	Scaled GWP SSL	No
116-B-2_Shallow	Cesium-137	pCi/g	1.2	— <sup>c</sup>	7.7	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-2_Shallow	Total beta radiostrontium	pCi/g	0.32	2,121	7.7	275	0.18	1	0,275	Scaled GWP SSL	No
116-B-3_Deep	Mercury	µg/kg	20	1.34E+07	2.2	6.10E+06	13	200	6,104,937	Scaled GWP SSL	No
116-B-3_Deep	Cesium-137	pCi/g	20	— <sup>c</sup>	2.2	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-3_Deep	Plutonium-239/240	pCi/g	0.26	— <sup>c</sup>	2.2	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-B-3_Deep	Total beta radiostrontium	pCi/g	3.2	2,121	2.2	964	0.18	1	0,964	Scaled GWP SSL	No
116-B-3_Shallow	Mercury	µg/kg	50	1.34E+07	6.5	2.07E+06	13	200	2,066,286	Scaled GWP SSL	No
116-B-4_Deep	Acetone	µg/kg	12	17,372	39	447	—	20	0,447	Scaled GWP SSL	No
116-B-4_Deep	Antimony	µg/kg	6,701	1.19E+07	39	305,857	130	600	305,857	Scaled GWP SSL	No
116-B-4_Deep	Aroclor-1254	µg/kg	130	— <sup>c</sup>	39	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
116-B-4_Deep	Bis(2-ethylhexyl) phthalate	µg/kg	290	— <sup>c</sup>	39	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
116-B-4_Deep	Chromium	µg/kg	92,716	— <sup>c</sup>	39	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-4_Deep	Hexavalent Chromium	µg/kg	423	6,000 <sup>e</sup>	39	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-4_Deep	Lead	µg/kg	94,296	— <sup>c</sup>	39	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-B-4_Deep	Mercury	µg/kg	440	1.34E+07	39	345,266	13	200	345,266	Scaled GWP SSL	No
116-B-4_Deep	Methylene chloride	µg/kg	8.0	14	39	0.35	—	5	5	RDL	Yes
116-B-4_Deep	Silver	µg/kg	720	27,530	39	708	167	200	0,708	Scaled GWP SSL	Yes
116-B-4_Deep	Americium-241	pCi/g	0.070	— <sup>c</sup>	39	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-B-4_Deep	Cesium-137	pCi/g	112	— <sup>c</sup>	39	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-B-4_Deep	Cobalt-60	pCi/g	18	— <sup>c</sup>	39	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-B-4_Deep	Europium-152	pCi/g	195	— <sup>c</sup>	39	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-B-4_Deep	Europium-154	pCi/g	45	— <sup>c</sup>	39	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater  
(With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width In Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length In Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
116-B-4_Deep	Europium-155	pCi/g	1.3	— <sup>c</sup>	39	— <sup>c</sup>	0.054	0.1	—	— <sup>c</sup>	—
116-B-4_Deep	Niobium-94	pCi/g	0.34	— <sup>h</sup>	39	— <sup>h</sup>	—	0.2	—	—	—
116-B-4_Shallow	Plutonium-238	pCi/g	0.37	— <sup>e</sup>	10	— <sup>e</sup>	0.0038	1	—	— <sup>e</sup>	—
116-B-4_Shallow	Plutonium-239/240	pCi/g	0.35	— <sup>e</sup>	10	— <sup>e</sup>	0.025	1	—	— <sup>e</sup>	—
116-B-5_Deep_Focused	Mercury	µg/kg	2,800	1.34E+07	19	725,992	13	200	725,992	Scaled GWP SSL	No
116-B-5_Deep_Focused	Cobalt-60	pCi/g	0.94	— <sup>e</sup>	19	— <sup>e</sup>	0.0084	0.05	—	— <sup>e</sup>	—
116-B-5_Deep_Focused	Europium-152	pCi/g	10.0	— <sup>e</sup>	19	— <sup>e</sup>	—	0.1	—	— <sup>e</sup>	—
116-B-5_Deep_Focused	Europium-154	pCi/g	0.88	— <sup>e</sup>	19	— <sup>e</sup>	0.033	0.1	—	— <sup>e</sup>	—
116-B-5_Shallow_Focused	Barium	µg/kg	300,000	3.89E+08	38	1.03E+07	132,000	2,000	10,345,745	Scaled GWP SSL	No
116-B-5_Shallow_Focused	Mercury	µg/kg	16,000	1.34E+07	38	357,204	13	200	357,204	Scaled GWP SSL	No
116-B-5_Shallow_Focused	Cesium-137	pCi/g	1.8	— <sup>e</sup>	38	— <sup>e</sup>	1.1	0.1	—	— <sup>e</sup>	—
116-B-5_Shallow_Focused	Cobalt-60	pCi/g	1.0	— <sup>e</sup>	38	— <sup>e</sup>	0.0084	0.05	—	— <sup>e</sup>	—
116-B-5_Shallow_Focused	Europium-152	pCi/g	7.3	— <sup>e</sup>	38	— <sup>e</sup>	—	0.1	—	— <sup>e</sup>	—
116-B-5_Shallow_Focused	Europium-154	pCi/g	0.67	— <sup>e</sup>	38	— <sup>e</sup>	0.033	0.1	—	— <sup>e</sup>	—
116-B-5_Shallow_Focused	Tritium	pCi/g	680	60	38	1.6	—	10	10	RDL	Yes
116-B-6A_Deep	Americium-241	pCi/g	0.16	— <sup>e</sup>	11	— <sup>e</sup>	—	1	—	— <sup>e</sup>	—
116-B-6A_Deep	Cesium-137	pCi/g	2.0	— <sup>e</sup>	11	— <sup>e</sup>	1.1	0.1	—	— <sup>e</sup>	—
116-B-6A_Deep	Plutonium-239/240	pCi/g	2.8	— <sup>e</sup>	11	— <sup>e</sup>	0.025	1	—	— <sup>e</sup>	—
116-B-6A_Deep	Total beta radiostrontium	pCi/g	21	2,121	11	193	0.18	1	0,193	Scaled GWP SSL	No
116-B-6A_Shallow	Lead	µg/kg	11,100	— <sup>c</sup>	7.9	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-B-6A_Shallow	Mercury	µg/kg	20	1.34E+07	7.9	1.70E+06	13	200	1,700,109	Scaled GWP SSL	No
116-B-6A_Shallow	Cesium-137	pCi/g	37	— <sup>e</sup>	7.9	— <sup>e</sup>	1.1	0.1	—	— <sup>e</sup>	—
116-B-6A_Shallow	Plutonium-239/240	pCi/g	0.23	— <sup>e</sup>	7.9	— <sup>e</sup>	0.025	1	—	— <sup>e</sup>	—
116-B-6A_Shallow	Total beta radiostrontium	pCi/g	3.3	2,121	7.9	268	0.18	1	0,268	Scaled GWP SSL	No
116-B-6A_Shallow	Uranium-233/234	pCi/g	1.4	— <sup>g</sup>	7.9	— <sup>g</sup>	1.1	1	—	—	—
116-B-6A_Shallow	Uranium-235	pCi/g	0.28	— <sup>g</sup>	7.9	— <sup>g</sup>	0.11	0.5	—	—	—
116-B-6B_Shallow	Mercury	µg/kg	40	1.34E+07	8.6	1.56E+06	13	200	1,561,728	Scaled GWP SSL	No
116-B-7, 132-B-6, 132-C-2_Deep	Chromium	µg/kg	25,200	— <sup>c</sup>	13	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Hexavalent Chromium	µg/kg	2,100	6,000 <sup>e</sup>	13	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-7, 132-B-6, 132-C-2_Deep	Mercury	µg/kg	750	1.34E+07	13	1.06E+06	13	200	1,057,548	Scaled GWP SSL	No
116-B-7, 132-B-6, 132-C-2_Deep	Cesium-137	pCi/g	3.5	— <sup>e</sup>	13	— <sup>e</sup>	1.1	0.1	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Cobalt-60	pCi/g	0.18	— <sup>e</sup>	13	— <sup>e</sup>	0.0084	0.05	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Europium-152	pCi/g	1.4	— <sup>e</sup>	13	— <sup>e</sup>	—	0.1	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Nickel-63	pCi/g	3.3	— <sup>e</sup>	13	— <sup>e</sup>	—	30	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Deep	Total beta radiostrontium	pCi/g	0.40	2,121	13	167	0.18	1	0,167	Scaled GWP SSL	No
116-B-7, 132-B-6, 132-C-2_Shallow	Chromium	µg/kg	19,087	— <sup>c</sup>	21	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Hexavalent Chromium	µg/kg	688	6,000 <sup>e</sup>	21	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-B-7, 132-B-6, 132-C-2_Shallow	Mercury	µg/kg	63	1.34E+07	21	642,625	13	200	642,625	Scaled GWP SSL	No
116-B-7, 132-B-6, 132-C-2_Shallow	Cobalt-60	pCi/g	0.25	— <sup>e</sup>	21	— <sup>e</sup>	0.0084	0.05	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Europium-152	pCi/g	1.9	— <sup>e</sup>	21	— <sup>e</sup>	—	0.1	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Europium-154	pCi/g	0.22	— <sup>e</sup>	21	— <sup>e</sup>	0.033	0.1	—	— <sup>e</sup>	—
116-B-7, 132-B-6, 132-C-2_Shallow	Nickel-63	pCi/g	3.6	— <sup>e</sup>	21	— <sup>e</sup>	—	30	—	— <sup>e</sup>	—
116-B-9_Shallow	Lead	µg/kg	12,000	— <sup>c</sup>	7.1	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-B-9_Shallow	Mercury	µg/kg	390	1.34E+07	7.1	1.89E+06	13	200	1,891,671	Scaled GWP SSL	No
116-C-1_Deep	Chromium	µg/kg	66,667	— <sup>c</sup>	58	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-C-1_Deep	Hexavalent Chromium	µg/kg	497	6,000 <sup>e</sup>	58	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-1_Deep	Lead	µg/kg	21,737	— <sup>c</sup>	58	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-C-1_Deep	Mercury	µg/kg	2,275	1.34E+07	58	233,580	13	200	233,580	Scaled GWP SSL	No
116-C-1_Deep	Total_U_Isotopes	µg/kg	34,266	— <sup>f</sup>	58	— <sup>f</sup>	3,210	—	—	—	—
116-C-1_Deep	Americium-241	pCi/g	25	— <sup>e</sup>	58	— <sup>e</sup>	—	1	—	— <sup>e</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
116-C-1_Deep	Cesium-137	pCi/g	1,484	— <sup>c</sup>	58	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-1_Deep	Cobalt-60	pCi/g	62	— <sup>c</sup>	58	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-1_Deep	Europium-152	pCi/g	412	— <sup>c</sup>	58	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-1_Deep	Europium-154	pCi/g	28	— <sup>c</sup>	58	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-C-1_Deep	Europium-155	pCi/g	1.6	— <sup>c</sup>	58	— <sup>c</sup>	0.054	0.1	—	— <sup>c</sup>	—
116-C-1_Deep	Nickel-63	pCi/g	634	— <sup>c</sup>	58	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-C-1_Deep	Plutonium-238	pCi/g	0.94	— <sup>c</sup>	58	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
116-C-1_Deep	Plutonium-239/240	pCi/g	46	— <sup>c</sup>	58	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-1_Deep	Total beta radiostrontium	pCi/g	64	2,121	58	37	0.18	1	0,037	Scaled GWP SSL	Yes
116-C-1_Deep	Uranium-234	pCi/g	5.1	— <sup>e</sup>	58	— <sup>e</sup>	1.1	1	—	—	—
116-C-1_Deep	Uranium-238	pCi/g	6.1	— <sup>e</sup>	58	— <sup>e</sup>	1.1	1	—	—	—
116-C-1_Deep_Focused	Antimony	µg/kg	2,600	1.19E+07	58	206,919	130	600	206,919	Scaled GWP SSL	No
116-C-1_Deep_Focused	Cadmium	µg/kg	2,900	1,256	58	22	1,510	50	1,510	Background Value	Yes
116-C-1_Deep_Focused	Chromium	µg/kg	148,000	— <sup>c</sup>	58	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Copper	µg/kg	30,400	7.69E+06	58	133,733	22,000	1,000	133,733	Scaled GWP SSL	No
116-C-1_Deep_Focused	Hexavalent Chromium	µg/kg	1,800	6,000 <sup>e</sup>	58	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-1_Deep_Focused	Lead	µg/kg	48,500	— <sup>c</sup>	58	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Mercury	µg/kg	11,800	1.34E+07	58	233,580	13	200	233,580	Scaled GWP SSL	No
116-C-1_Deep_Focused	Silver	µg/kg	890	27,530	58	479	167	200	0,479	Scaled GWP SSL	Yes
116-C-1_Deep_Focused	Zinc	µg/kg	464,000	3.89E+08	58	6.77E+06	67,800	1,000	6,765,217	Scaled GWP SSL	No
116-C-1_Deep_Focused	Americium-241	pCi/g	83	— <sup>c</sup>	58	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Cesium-137	pCi/g	5,690	— <sup>c</sup>	58	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Cobalt-60	pCi/g	115	— <sup>c</sup>	58	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Europium-152	pCi/g	1,120	— <sup>c</sup>	58	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Europium-154	pCi/g	144	— <sup>c</sup>	58	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Nickel-63	pCi/g	1,590	— <sup>c</sup>	58	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Plutonium-238	pCi/g	4.0	— <sup>c</sup>	58	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Plutonium-239/240	pCi/g	136	— <sup>c</sup>	58	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-1_Deep_Focused	Total beta radiostrontium	pCi/g	88	2,121	58	37	0.18	1	0,037	Scaled GWP SSL	Yes
116-C-1_Shallow	Mercury	µg/kg	30	1.34E+07	12	1.09E+06	13	200	1,091,940	Scaled GWP SSL	No
116-C-1_Shallow	Cobalt-60	pCi/g	0.074	— <sup>c</sup>	12	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-1_Shallow	Europium-152	pCi/g	1.6	— <sup>c</sup>	12	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-1_Shallow	Plutonium-239/240	pCi/g	0.22	— <sup>c</sup>	12	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-1_Shallow	Total beta radiostrontium	pCi/g	0.20	2,121	12	172	0.18	1	0,172	Scaled GWP SSL	No
116-C-2A_Deep	Chromium	µg/kg	29,500	— <sup>c</sup>	14	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-C-2A_Deep	Hexavalent Chromium	µg/kg	848	6,000 <sup>e</sup>	14	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-2A_Deep	Lead	µg/kg	14,000	— <sup>c</sup>	14	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-C-2A_Deep	Mercury	µg/kg	150	1.34E+07	14	945,835	13	200	945,835	Scaled GWP SSL	No
116-C-2A_Deep	Americium-241	pCi/g	0.71	— <sup>c</sup>	14	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-C-2A_Deep	Cesium-137	pCi/g	23	— <sup>c</sup>	14	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-2A_Deep	Cobalt-60	pCi/g	12	— <sup>c</sup>	14	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-2A_Deep	Europium-152	pCi/g	30	— <sup>c</sup>	14	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-2A_Deep	Europium-154	pCi/g	3.3	— <sup>c</sup>	14	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-C-2A_Deep	Nickel-63	pCi/g	540	— <sup>c</sup>	14	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-C-2A_Deep	Plutonium-238	pCi/g	0.15	— <sup>c</sup>	14	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
116-C-2A_Deep	Plutonium-239/240	pCi/g	1.5	— <sup>c</sup>	14	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-2A_Deep	Total beta radiostrontium	pCi/g	6.2	2,121	14	149	0.18	1	0,149	Scaled GWP SSL	No
116-C-2A_Shallow	Mercury	µg/kg	120	1.34E+07	9.8	1.37E+06	13	200	1,370,496	Scaled GWP SSL	No
116-C-2A_Shallow	Cobalt-60	pCi/g	0.23	— <sup>c</sup>	9.8	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-2A_Shallow	Europium-152	pCi/g	0.26	— <sup>c</sup>	9.8	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater  
(With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg · m or pCi · m / kg · g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
116-C-2A_Shallow	Nickel-63	pCi/g	4.7	— <sup>c</sup>	9.8	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-C-2A_Shallow	Plutonium-239/240	pCi/g	0.10	— <sup>c</sup>	9.8	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-2A_Shallow	Total beta radiostrontium	pCi/g	1.9	2,121	9.8	216	0.18	1	0,216	Scaled GWP SSL	No
116-C-3_Shallow	Antimony	µg/kg	1,080	1.19E+07	5.0	2.38E+06	130	600	2,379,565	Scaled GWP SSL	No
116-C-3_Shallow	Boron	µg/kg	7,239	348,488	5.0	69,698	3,890	2,000	69,698	Scaled GWP SSL	No
116-C-3_Shallow	Hexavalent Chromium	µg/kg	1,430	6,000 <sup>e</sup>	5.0	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-3_Shallow	Nitrogen in Nitrite and Nitrate	µg/kg	1,430	23,943	5.0	4,789	—	750	4,789	Scaled GWP SSL	No
116-C-3_Shallow	Carbon-14	pCi/g	42	— <sup>c</sup>	5.0	— <sup>c</sup>	—	2	—	— <sup>c</sup>	—
116-C-3_Shallow	Plutonium-239/240	pCi/g	0.15	— <sup>c</sup>	5.0	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-3_Shallow	Total beta radiostrontium	pCi/g	0.64	2,121	5.0	424	0.18	1	0,424	Scaled GWP SSL	No
116-C-3_Shallow	Tritium	pCi/g	7.2	60	5.0	12	—	10	0,012	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Barium	µg/kg	196,000	3.89E+08	4.6	8.46E+07	132,000	2,000	84,565,217	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Boron	µg/kg	24,300	348,488	4.6	75,758	3,890	2,000	75,758	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Chromium	µg/kg	26,400	— <sup>c</sup>	4.6	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Hexavalent Chromium	µg/kg	1,500	6,000 <sup>e</sup>	4.6	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-3_Shallow_Focused	Molybdenum	µg/kg	1,100	563,885	4.6	122,584	470	2,000	122,584	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Nitrogen in Nitrite and Nitrate	µg/kg	480	23,943	4.6	5,205	—	750	5,205	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Silver	µg/kg	270	27,530	4.6	5,985	167	200	5,985	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Americium-241	pCi/g	0.27	— <sup>c</sup>	4.6	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Cesium-137	pCi/g	14	— <sup>c</sup>	4.6	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Plutonium-239/240	pCi/g	0.91	— <sup>c</sup>	4.6	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-3_Shallow_Focused	Total beta radiostrontium	pCi/g	18	2,121	4.6	461	0.18	1	0,461	Scaled GWP SSL	No
116-C-3_Shallow_Focused	Tritium	pCi/g	4.0	60	4.6	13	—	10	0,013	Scaled GWP SSL	No
116-C-5_Deep	Chromium	µg/kg	41,332	— <sup>c</sup>	93	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
116-C-5_Deep	Hexavalent Chromium	µg/kg	1,290	6,000 <sup>e</sup>	93	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-5_Deep	Lead	µg/kg	20,715	— <sup>c</sup>	93	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
116-C-5_Deep	Mercury	µg/kg	2,436	1.34E+07	93	144,263	13	200	144,263	Scaled GWP SSL	No
116-C-5_Deep	Americium-241	pCi/g	2.2	— <sup>c</sup>	93	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-C-5_Deep	Cesium-137	pCi/g	52	— <sup>c</sup>	93	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-5_Deep	Cobalt-60	pCi/g	18	— <sup>c</sup>	93	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-5_Deep	Europium-152	pCi/g	73	— <sup>c</sup>	93	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-5_Deep	Europium-154	pCi/g	16	— <sup>c</sup>	93	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-C-5_Deep	Europium-155	pCi/g	0.48	— <sup>c</sup>	93	— <sup>c</sup>	0.054	0.1	—	— <sup>c</sup>	—
116-C-5_Deep	Nickel-63	pCi/g	644	— <sup>c</sup>	93	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-C-5_Deep	Plutonium-238	pCi/g	0.14	— <sup>c</sup>	93	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
116-C-5_Deep	Plutonium-239/240	pCi/g	4.6	— <sup>c</sup>	93	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-5_Deep	Total beta radiostrontium	pCi/g	4.4	2,121	93	23	0.18	1	0,023	Scaled GWP SSL	No
116-C-5_Shallow	Hexavalent Chromium	µg/kg	239	6,000 <sup>e</sup>	10	6,000	—	1,000	6,000	— <sup>e</sup>	No
116-C-5_Shallow	Mercury	µg/kg	32	1.34E+07	10	1.29E+06	13	200	1,291,429	Scaled GWP SSL	No
116-C-5_Shallow	Americium-241	pCi/g	0.39	— <sup>c</sup>	10	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-C-5_Shallow	Cesium-137	pCi/g	1.2	— <sup>c</sup>	10	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-5_Shallow	Cobalt-60	pCi/g	0.15	— <sup>c</sup>	10	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
116-C-5_Shallow	Europium-152	pCi/g	1.5	— <sup>c</sup>	10	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-5_Shallow	Europium-154	pCi/g	0.32	— <sup>c</sup>	10	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
116-C-5_Shallow	Nickel-63	pCi/g	7.8	— <sup>c</sup>	10	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
116-C-5_Shallow	Plutonium-239/240	pCi/g	0.20	— <sup>c</sup>	10	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-5_Shallow	Total beta radiostrontium	pCi/g	0.39	2,121	10	204	0.18	1	0,204	Scaled GWP SSL	No
116-C-6_Shallow_Focused	Americium-241	pCi/g	0.64	— <sup>c</sup>	2.4	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Cesium-137	pCi/g	1.9	— <sup>c</sup>	2.4	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Europium-152	pCi/g	0.25	— <sup>c</sup>	2.4	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Nickel-63	pCi/g	5.4	— <sup>c</sup>	2.4	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (μg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (μg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (μg/kg or pCi/g)	Required Detection Limit (μg/kg or pCi/g)	Selected GWP SSL (μg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
116-C-6_Shallow_Focused	Plutonium-239/240	pCi/g	0.53	— <sup>c</sup>	2.4	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
116-C-6_Shallow_Focused	Total beta radiostrontium	pCi/g	0.46	2,121	2.4	884	0.18	1	0,884	Scaled GWP SSL	No
118-B-1_Shallow_1	4-Methyl-2-pentanone	μg/kg	8.0	1,783	37	48	—	—	0,048	Scaled GWP SSL	No
118-B-1_Shallow_1	Acetone	μg/kg	23	17,372	37	465	—	20	0,465	Scaled GWP SSL	No
118-B-1_Shallow_1	Bis(2-ethylhexyl) phthalate	μg/kg	240	— <sup>c</sup>	37	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-B-1_Shallow_1	Di-n-butylphthalate	μg/kg	19	88,471	37	2,366	—	330	2,366	Scaled GWP SSL	No
118-B-1_Shallow_1	Mercury	μg/kg	20	1.34E+07	37	359,114	13	200	359,114	Scaled GWP SSL	No
118-B-1_Shallow_1	Methylene chloride	μg/kg	15	14	37	0.36	—	5	5	RDL	Yes
118-B-1_Shallow_1	Carbon-14	pCi/g	3.4	— <sup>c</sup>	37	— <sup>c</sup>	—	2	—	— <sup>c</sup>	—
118-B-1_Shallow_1	Europium-152	pCi/g	1.2	— <sup>c</sup>	37	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
118-B-1_Shallow_1	Total beta radiostrontium	pCi/g	0.28	2,121	37	57	0.18	1	0,057	Scaled GWP SSL	No
118-B-1_Shallow_1	Tritium	pCi/g	239	60	37	1.6	—	10	10	RDL	Yes
118-B-1_Shallow_2	Boron	μg/kg	5,500	348,488	6.1	57,129	3,890	2,000	57,129	Scaled GWP SSL	No
118-B-1_Shallow_2	Hexavalent Chromium	μg/kg	330	6,000 <sup>e</sup>	6.1	6,000	—	1,000	6,000	— <sup>e</sup>	No
118-B-1_Shallow_2	Total beta radiostrontium	pCi/g	0.25	2,121	6.1	348	0.18	1	0,348	Scaled GWP SSL	No
118-B-1_Shallow_2	Tritium	pCi/g	60	60	6.1	9.8	—	10	10	RDL	Yes
118-B-1_Shallow_3	4-Methyl-2-pentanone	μg/kg	6.0	1,783	9.8	182	—	—	0,182	Scaled GWP SSL	No
118-B-1_Shallow_3	Acetone	μg/kg	16	17,372	9.8	1,773	—	20	1,773	Scaled GWP SSL	No
118-B-1_Shallow_3	Bis(2-ethylhexyl) phthalate	μg/kg	39	— <sup>c</sup>	9.8	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-B-1_Shallow_3	Boron	μg/kg	8,900	348,488	9.8	35,560	3,890	2,000	35,560	Scaled GWP SSL	No
118-B-1_Shallow_3	Carbon tetrachloride	μg/kg	11	5.0	9.8	0.51	—	5	5	RDL	Yes
118-B-1_Shallow_3	Di-n-butylphthalate	μg/kg	54	88,471	9.8	9,028	—	330	9,028	Scaled GWP SSL	No
118-B-1_Shallow_3	Hexavalent Chromium	μg/kg	210	6,000 <sup>e</sup>	9.8	6,000	—	1,000	6,000	— <sup>e</sup>	No
118-B-1_Shallow_3	Mercury	μg/kg	300	1.34E+07	9.8	1.37E+06	13	200	1,370,496	Scaled GWP SSL	No
118-B-1_Shallow_3	Methylene chloride	μg/kg	26	14	9.8	1.4	—	5	5	RDL	Yes
118-B-1_Shallow_3	Cesium-137	pCi/g	1.5	— <sup>c</sup>	9.8	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
118-B-1_Shallow_3	Total beta radiostrontium	pCi/g	4.4	2,121	9.8	216	0.18	1	0,216	Scaled GWP SSL	No
118-B-1_Shallow_3	Tritium	pCi/g	19	60	9.8	6.1	—	10	10	RDL	Yes
118-B-1_Shallow_4	2,4-D(2,4-Dichlorophenoxyacetic acid)	μg/kg	13	400	17	23	—	400	400	RDL	No
118-B-1_Shallow_4	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	μg/kg	19	705	17	41	—	100	100	RDL	No
118-B-1_Shallow_4	4,4'-DDE (Dichlorodiphenyldichloroethylene)	μg/kg	16	— <sup>c</sup>	17	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
118-B-1_Shallow_4	Acetone	μg/kg	19	17,372	17	1,010	—	20	1,010	Scaled GWP SSL	No
118-B-1_Shallow_4	Aroclor-1254	μg/kg	80	— <sup>c</sup>	17	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
118-B-1_Shallow_4	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	μg/kg	7.8	3.8	17	0.22	—	1.7	1.7	RDL	Yes
118-B-1_Shallow_4	Bis(2-ethylhexyl) phthalate	μg/kg	600	— <sup>c</sup>	17	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-B-1_Shallow_4	Boron	μg/kg	3,900	348,488	17	20,261	3,890	2,000	20,261	Scaled GWP SSL	No
118-B-1_Shallow_4	Carbon tetrachloride	μg/kg	17	5.0	17	0.29	—	5	5	RDL	Yes
118-B-1_Shallow_4	Chlordane	μg/kg	2.5	1.42E+06	17	82,619	—	1.7	82,619	Scaled GWP SSL	No
118-B-1_Shallow_4	Dalapon	μg/kg	48	499	17	29	—	100	100	RDL	No
118-B-1_Shallow_4	Dieldrin	μg/kg	3.8	166	17	9.7	—	3.3	0,010	Scaled GWP SSL	No
118-B-1_Shallow_4	Diethylphthalate	μg/kg	17	63,829	17	3,711	—	330	3,711	Scaled GWP SSL	No
118-B-1_Shallow_4	Di-n-butylphthalate	μg/kg	63	88,471	17	5,144	—	330	5,144	Scaled GWP SSL	No
118-B-1_Shallow_4	Endrin	μg/kg	1.5	1,219	17	71	—	3	0,071	Scaled GWP SSL	No
118-B-1_Shallow_4	Hexavalent Chromium	μg/kg	300	6,000 <sup>e</sup>	17	6,000	—	1,000	6,000	— <sup>e</sup>	No
118-B-1_Shallow_4	Methylene chloride	μg/kg	12	14	17	0.79	—	5	5	RDL	Yes
118-B-1_Shallow_4	Phenol	μg/kg	26	7,909	17	460	—	330	0,460	Scaled GWP SSL	No
118-B-1_Shallow_5	Acetone	μg/kg	19	17,372	33	525	—	20	0,525	Scaled GWP SSL	No
118-B-1_Shallow_5	Bis(2-ethylhexyl) phthalate	μg/kg	58	— <sup>c</sup>	33	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-B-1_Shallow_5	Hexavalent Chromium	μg/kg	260	6,000 <sup>e</sup>	33	6,000	—	1,000	6,000	— <sup>e</sup>	No
118-B-1_Shallow_5	Mercury	μg/kg	40	1.34E+07	33	405,766	13	200	405,766	Scaled GWP SSL	No
118-B-1_Shallow_5	Methylene chloride	μg/kg	13	14	33	0.41	—	5	5	RDL	Yes
118-B-1_Shallow_5	Cesium-137	pCi/g	3.6	— <sup>c</sup>	33	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
118-B-1_Shallow_5	Total beta radiostrontium	pCi/g	2.4	2,121	33	64	0.18	1	0,064	Scaled GWP SSL	No
118-B-1_Shallow_6	2,4,5-TP(2-(2,4,5-Trichlorophenoxy)propionic acid)Silvex	μg/kg	12	415	8.6	48	—	20	0,048	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-1_Shallow_6	2,4-D(2,4-Dichlorophenoxyacetic acid)	µg/kg	62	400	8.6	47	--	400	400	RDL	No
118-B-1_Shallow_6	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	µg/kg	43	705	8.6	82	--	100	100	RDL	No
118-B-1_Shallow_6	Acetone	µg/kg	8.0	17,372	8.6	2,020	--	20	2,020	Scaled GWP SSL	No
118-B-1_Shallow_6	Aldrin	µg/kg	0.50	9,878	8.6	1,149	--	1.7	1,149	Scaled GWP SSL	No
118-B-1_Shallow_6	Bis(2-ethylhexyl) phthalate	µg/kg	430	-- <sup>c</sup>	8.6	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
118-B-1_Shallow_6	Boron	µg/kg	8,800	348,488	8.6	40,522	3,890	2,000	40,522	Scaled GWP SSL	No
118-B-1_Shallow_6	Butylbenzylphthalate	µg/kg	24	60,438	8.6	7,028	--	330	7,028	Scaled GWP SSL	No
118-B-1_Shallow_6	Carbon tetrachloride	µg/kg	7.0	5.0	8.6	0.58	--	5	5	RDL	Yes
118-B-1_Shallow_6	Dalapon	µg/kg	38	499	8.6	58	--	100	100	RDL	No
118-B-1_Shallow_6	Di-n-butylphthalate	µg/kg	84	88,471	8.6	10,287	--	330	10,287	Scaled GWP SSL	No
118-B-1_Shallow_6	Hexavalent Chromium	µg/kg	280	6,000 <sup>e</sup>	8.6	6,000	--	1,000	6,000	-- <sup>e</sup>	No
118-B-1_Shallow_6	Mercury	µg/kg	20	1.34E+07	8.6	1.56E+06	13	200	1,561,728	Scaled GWP SSL	No
118-B-1_Shallow_6	Methylene chloride	µg/kg	10	14	8.6	1.6	--	5	5	RDL	Yes
118-B-1_Shallow_6	Phenol	µg/kg	23	7,909	8.6	920	--	330	0,920	Scaled GWP SSL	No
118-B-1_Shallow_6	Tritium	pCi/g	5.0	60	8.6	6.9	--	10	10	RDL	No
118-B-1_Shallow_7	2,4-D(2,4-Dichlorophenoxyacetic acid)	µg/kg	26	400	55	7.3	--	400	400	RDL	No
118-B-1_Shallow_7	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	µg/kg	27	705	55	13	--	100	100	RDL	No
118-B-1_Shallow_7	2-Methylnaphthalene	µg/kg	26	2,896	55	53	--	330	330	RDL	No
118-B-1_Shallow_7	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	15	-- <sup>c</sup>	55	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
118-B-1_Shallow_7	4-Amino-3,5,6-trichloropicolinic acid	µg/kg	14	1,806	55	33	--	--	0,033	Scaled GWP SSL	No
118-B-1_Shallow_7	Acetone	µg/kg	10	17,372	55	316	--	20	0,316	Scaled GWP SSL	No
118-B-1_Shallow_7	Alpha-Chlordane	µg/kg	12	1.42E+06	55	25,837	--	17	25,837	Scaled GWP SSL	No
118-B-1_Shallow_7	Barium	µg/kg	145,000	3.89E+08	55	7.07E+06	132,000	2,000	7,072,727	Scaled GWP SSL	No
118-B-1_Shallow_7	Boron	µg/kg	18,100	348,488	55	6,336	3,890	2,000	6,336	Scaled GWP SSL	Yes
118-B-1_Shallow_7	Carbon tetrachloride	µg/kg	10	5.0	55	0.091	--	5	5	RDL	Yes
118-B-1_Shallow_7	Copper	µg/kg	25,700	7.69E+06	55	139,811	22,000	1,000	139,811	Scaled GWP SSL	No
118-B-1_Shallow_7	Dalapon	µg/kg	32	499	55	9.1	--	100	100	RDL	No
118-B-1_Shallow_7	Dicamba	µg/kg	13	1,582	55	29	--	100	100	RDL	No
118-B-1_Shallow_7	Dieldrin	µg/kg	1.7	166	55	3.0	--	3.3	3.3	RDL	No
118-B-1_Shallow_7	Diethylphthalate	µg/kg	25	63,829	55	1,161	--	330	1,161	Scaled GWP SSL	No
118-B-1_Shallow_7	Hexavalent Chromium	µg/kg	300	6,000 <sup>e</sup>	55	6,000	--	1,000	6,000	-- <sup>e</sup>	No
118-B-1_Shallow_7	Lead	µg/kg	12,900	-- <sup>c</sup>	55	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
118-B-1_Shallow_7	Mercury	µg/kg	20	1.34E+07	55	244,197	13	200	244,197	Scaled GWP SSL	No
118-B-1_Shallow_7	Methoxychlor	µg/kg	9.1	-- <sup>c</sup>	55	-- <sup>c</sup>	--	20	--	-- <sup>c</sup>	--
118-B-1_Shallow_7	Methylene chloride	µg/kg	10	14	55	0.25	--	5	5	RDL	Yes
118-B-1_Shallow_7	Molybdenum	µg/kg	2,100	563,885	55	10,252	470	2,000	10,252	Scaled GWP SSL	No
118-B-1_Shallow_7	Naphthalene	µg/kg	19	6,798	55	124	--	330	330	RDL	No
118-B-1_Shallow_7	Europium-152	pCi/g	0.10	-- <sup>c</sup>	55	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Acetone	µg/kg	99	17,372	251	69	--	20	0,069	Scaled GWP SSL	Yes
118-B-1_Shallow_Focused	Barium	µg/kg	261,000	3.89E+08	251	1.55E+06	132,000	2,000	1,550,418	Scaled GWP SSL	No
118-B-1_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	38	-- <sup>c</sup>	251	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Boron	µg/kg	24,500	348,488	251	1,389	3,890	2,000	3,890	Background Value	Yes
118-B-1_Shallow_Focused	Copper	µg/kg	28,000	7.69E+06	251	30,648	22,000	1,000	30,648	Scaled GWP SSL	No
118-B-1_Shallow_Focused	Dicamba	µg/kg	9.1	1,582	251	6.3	--	100	100	RDL	No
118-B-1_Shallow_Focused	Lead	µg/kg	34,300	-- <sup>c</sup>	251	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Mercury	µg/kg	14,500	1.34E+07	251	53,531	13	200	53,531	Scaled GWP SSL	No
118-B-1_Shallow_Focused	Methoxychlor	µg/kg	4.7	-- <sup>c</sup>	251	-- <sup>c</sup>	--	20	--	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Methylene chloride	µg/kg	16	14	251	0.054	--	5	5	RDL	Yes
118-B-1_Shallow_Focused	Molybdenum	µg/kg	810	563,885	251	2,247	470	2,000	2,247	Scaled GWP SSL	No
118-B-1_Shallow_Focused	Cobalt-60	pCi/g	0.16	-- <sup>c</sup>	251	-- <sup>c</sup>	0.0084	0.05	--	-- <sup>c</sup>	--
118-B-1_Shallow_Focused	Tritium	pCi/g	137	60	251	0.24	--	10	10	RDL	Yes
118-B-10_Shallow	Cobalt-60	pCi/g	0.46	-- <sup>c</sup>	8.6	-- <sup>c</sup>	0.0084	0.05	--	-- <sup>c</sup>	--
118-B-10_Shallow	Nickel-63	pCi/g	157	-- <sup>c</sup>	8.6	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
118-B-10_Shallow_Focused	Lead	µg/kg	16,200	-- <sup>c</sup>	2.1	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
118-B-10_Shallow_Focused	Mercury	µg/kg	230	1.34E+07	2.1	6.40E+06	13	200	6,395,648	Scaled GWP SSL	No
118-B-3_Shallow	Hexavalent Chromium	µg/kg	298	6,000 <sup>e</sup>	28	6,000	--	1,000	6,000	-- <sup>e</sup>	No
118-B-3_Shallow	Cobalt-60	pCi/g	0.086	-- <sup>c</sup>	28	-- <sup>c</sup>	0.0084	0.05	--	-- <sup>c</sup>	--
118-B-3_Shallow	Europium-152	pCi/g	0.21	-- <sup>c</sup>	28	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
118-B-3_Shallow	Europium-154	pCi/g	0.18	-- <sup>c</sup>	28	-- <sup>c</sup>	0.033	0.1	--	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	57	-- <sup>c</sup>	63	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	Lead	µg/kg	43,900	-- <sup>c</sup>	63	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	Mercury	µg/kg	34	1.34E+07	63	212,514	13	200	212,514	Scaled GWP SSL	No
118-B-3_Shallow_Focused	Cobalt-60	pCi/g	0.17	-- <sup>c</sup>	63	-- <sup>c</sup>	0.0084	0.05	--	-- <sup>c</sup>	--
118-B-3_Shallow_Focused	Europium-152	pCi/g	1.1	-- <sup>c</sup>	63	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
118-B-4_Shallow	Hexavalent Chromium	µg/kg	250	6,000 <sup>e</sup>	24	6,000	--	1,000	6,000	-- <sup>e</sup>	No
118-B-4_Shallow	Europium-152	pCi/g	0.35	-- <sup>c</sup>	24	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
118-B-6_Deep	Tritium	pCi/g	2,780	60	6.2	9.6	--	10	10	RDL	Yes
118-B-6_Shallow	Mercury	µg/kg	80	1.34E+07	17	790,051	13	200	790,051	Scaled GWP SSL	No
118-B-6_Shallow	Tritium	pCi/g	241	60	17	3.5	--	10	10	RDL	Yes
118-B-7_Shallow_Focused	Lead	µg/kg	22,900	-- <sup>c</sup>	0.20	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
118-B-7_Shallow_Focused	Mercury	µg/kg	110	1.34E+07	0.20	6.72E+07	13	200	67,154,305	Scaled GWP SSL	No
118-B-7_Shallow_Focused	Silver	µg/kg	720	27,530	0.20	137,649	167	200	137,649	Scaled GWP SSL	No
118-B-9_Shallow_Focused	Antimony	µg/kg	695	1.19E+07	4.2	2.83E+06	130	600	2,832,816	Scaled GWP SSL	No
118-B-9_Shallow_Focused	Barium	µg/kg	141,000	3.89E+08	4.2	9.26E+07	132,000	2,000	92,619,048	Scaled GWP SSL	No
118-B-9_Shallow_Focused	Boron	µg/kg	9,700	348,488	4.2	82,973	3,890	2,000	82,973	Scaled GWP SSL	No
118-B-9_Shallow_Focused	Lead	µg/kg	26,900	-- <sup>c</sup>	4.2	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
118-B-9_Shallow_Focused	Mercury	µg/kg	225	1.34E+07	4.2	3.20E+06	13	200	3,197,824	Scaled GWP SSL	No
118-B-9_Shallow_Focused	Zinc	µg/kg	250,000	3.89E+08	4.2	9.26E+07	67,800	1,000	92,619,048	Scaled GWP SSL	No
118-C-1_Shallow_1	Europium-152	pCi/g	0.16	-- <sup>c</sup>	30	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
118-C-1_Shallow_2	Bis(2-ethylhexyl) phthalate	µg/kg	400	-- <sup>c</sup>	17	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
118-C-1_Shallow_2	Di-n-butylphthalate	µg/kg	35	88,471	17	5,174	--	330	5,174	Scaled GWP SSL	No
118-C-1_Shallow_2	Hexavalent Chromium	µg/kg	240	6,000 <sup>e</sup>	17	6,000	--	1,000	6,000	-- <sup>e</sup>	No
118-C-1_Shallow_2	Methylene chloride	µg/kg	14	14	17	0.79	--	5	5	RDL	Yes
118-C-1_Shallow_2	Carbon-14	pCi/g	12	-- <sup>c</sup>	17	-- <sup>c</sup>	--	2	--	-- <sup>c</sup>	--
118-C-1_Shallow_2	Cobalt-60	pCi/g	1.5	-- <sup>c</sup>	17	-- <sup>c</sup>	0.0084	0.05	--	-- <sup>c</sup>	--
118-C-1_Shallow_2	Europium-152	pCi/g	0.28	-- <sup>c</sup>	17	-- <sup>c</sup>	--	0.1	--	-- <sup>c</sup>	--
118-C-1_Shallow_2	Nickel-63	pCi/g	36	-- <sup>c</sup>	17	-- <sup>c</sup>	--	30	--	-- <sup>c</sup>	--
118-C-1_Shallow_2	Tritium	pCi/g	7.7	60	17	3.5	--	10	10	RDL	No
118-C-1_Shallow_3	Acetone	µg/kg	11	17,372	42	418	--	20	0,418	Scaled GWP SSL	No
118-C-1_Shallow_3	Aroclor-1254	µg/kg	62	-- <sup>c</sup>	42	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Benzo(a)anthracene	µg/kg	180	-- <sup>c</sup>	42	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Benzo(a)pyrene	µg/kg	120	-- <sup>c</sup>	42	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Benzo(b)fluoranthene	µg/kg	140	-- <sup>c</sup>	42	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Benzo(k)fluoranthene	µg/kg	140	-- <sup>c</sup>	42	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Bis(2-ethylhexyl) phthalate	µg/kg	240	-- <sup>c</sup>	42	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Butylbenzylphthalate	µg/kg	38	60,438	42	1,453	--	330	1,453	Scaled GWP SSL	No
118-C-1_Shallow_3	Chrysene	µg/kg	210	-- <sup>c</sup>	42	-- <sup>c</sup>	--	100	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Copper	µg/kg	45,200	7.69E+06	42	184,847	22,000	1,000	184,847	Scaled GWP SSL	No
118-C-1_Shallow_3	Di-n-butylphthalate	µg/kg	63	88,471	42	2,127	--	330	2,127	Scaled GWP SSL	No
118-C-1_Shallow_3	Fluoranthene	µg/kg	320	3.89E+08	42	9.35E+06	--	330	9,350,962	Scaled GWP SSL	No
118-C-1_Shallow_3	Indeno(1,2,3-cd)pyrene	µg/kg	46	-- <sup>c</sup>	42	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Lead	µg/kg	23,100	-- <sup>c</sup>	42	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
118-C-1_Shallow_3	Mercury	µg/kg	50	1.34E+07	42	322,857	13	200	322,857	Scaled GWP SSL	No
118-C-1_Shallow_3	Methylene chloride	µg/kg	12	14	42	0.33	--	5	5	RDL	Yes
118-C-1_Shallow_3	Molybdenum	µg/kg	4,500	563,885	42	13,555	470	2,000	13,555	Scaled GWP SSL	No
118-C-1_Shallow_3	Pyrene	µg/kg	320	3.89E+08	42	9.35E+06	--	330	9,350,962	Scaled GWP SSL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg · m or pCi · m / kg · g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
118-C-1_Shallow_3	Zinc	µg/kg	77,100	3.89E+08	42	9.35E+06	67,800	1,000	9,350,962	Scaled GWP SSL	No
118-C-1_Shallow_3	Cobalt-60	pCi/g	0.042	— <sup>c</sup>	42	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
118-C-1_Shallow_3	Europium-152	pCi/g	0.14	— <sup>c</sup>	42	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
118-C-1_Shallow_3	Total beta radiostrontium	pCi/g	0.28	2,121	42	51	0.18	1	0,051	Scaled GWP SSL	No
118-C-1_Shallow_4	Acetone	µg/kg	13	17,372	32	536	—	20	0,536	Scaled GWP SSL	No
118-C-1_Shallow_4	Aroclor-1254	µg/kg	16	— <sup>c</sup>	32	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Barium	µg/kg	286,000	3.89E+08	32	1.20E+07	132,000	2,000	12,006,173	Scaled GWP SSL	No
118-C-1_Shallow_4	Benzene	µg/kg	1.0	5.0	32	0.15	—	5	5	RDL	No
118-C-1_Shallow_4	Benzo(a)anthracene	µg/kg	130	— <sup>c</sup>	32	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Benzo(a)pyrene	µg/kg	83	— <sup>c</sup>	32	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Benzo(b)fluoranthene	µg/kg	110	— <sup>c</sup>	32	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Benzo(k)fluoranthene	µg/kg	92	— <sup>c</sup>	32	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Bis(2-ethylhexyl) phthalate	µg/kg	17	— <sup>c</sup>	32	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Boron	µg/kg	4,900	348,488	32	10,756	3,890	2,000	10,756	Scaled GWP SSL	No
118-C-1_Shallow_4	Chrysene	µg/kg	170	— <sup>c</sup>	32	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Di-n-butylphthalate	µg/kg	26	88,471	32	2,731	—	330	2,731	Scaled GWP SSL	No
118-C-1_Shallow_4	Fluoranthene	µg/kg	330	3.89E+08	32	1.20E+07	—	330	12,006,173	Scaled GWP SSL	No
118-C-1_Shallow_4	Indeno(1,2,3-cd)pyrene	µg/kg	35	— <sup>c</sup>	32	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Methylene chloride	µg/kg	13	14	32	0.42	—	5	5	RDL	Yes
118-C-1_Shallow_4	Pyrene	µg/kg	350	3.89E+08	32	1.20E+07	—	330	12,006,173	Scaled GWP SSL	No
118-C-1_Shallow_4	Xylenes (total)	µg/kg	1.0	16,314	32	504	—	1	0,504	Scaled GWP SSL	No
118-C-1_Shallow_4	Cesium-137	pCi/g	1.2	— <sup>c</sup>	32	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
118-C-1_Shallow_4	Europium-152	pCi/g	0.16	— <sup>c</sup>	32	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
118-C-1_Shallow_Focused	Acetone	µg/kg	24	17,372	84	206	—	20	0,206	Scaled GWP SSL	No
118-C-1_Shallow_Focused	Aroclor-1254	µg/kg	22	— <sup>c</sup>	84	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
118-C-1_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	67	— <sup>c</sup>	84	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-1_Shallow_Focused	Carbon tetrachloride	µg/kg	39	5.0	84	0.059	—	5	5	RDL	Yes
118-C-1_Shallow_Focused	Copper	µg/kg	23,300	7.69E+06	84	91,326	22,000	1,000	91,326	Scaled GWP SSL	No
118-C-1_Shallow_Focused	Diethylphthalate	µg/kg	22	63,829	84	758	—	330	0,758	Scaled GWP SSL	No
118-C-1_Shallow_Focused	Di-n-butylphthalate	µg/kg	55	88,471	84	1,051	—	330	1,051	Scaled GWP SSL	No
118-C-1_Shallow_Focused	Mercury	µg/kg	40	1.34E+07	84	159,511	13	200	159,511	Scaled GWP SSL	No
118-C-1_Shallow_Focused	Methylene chloride	µg/kg	19	14	84	0.16	—	5	5	RDL	Yes
118-C-1_Shallow_Focused	Phenol	µg/kg	36	7,909	84	94	—	330	330	RDL	No
118-C-1_Shallow_Focused	Plutonium-239/240	pCi/g	0.20	— <sup>c</sup>	84	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
118-C-2_Shallow	Nickel-63	pCi/g	79	— <sup>c</sup>	9.8	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Hexavalent Chromium	µg/kg	120	6,000 <sup>e</sup>	4.3	6,000	—	1,000	6,000	— <sup>e</sup>	No
118-C-3:2_Deep_Focused	Lead	µg/kg	120,000	— <sup>c</sup>	4.3	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Americium-241	pCi/g	2.7	— <sup>c</sup>	4.3	— <sup>c</sup>	—	1	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Cesium-137	pCi/g	171	— <sup>c</sup>	4.3	— <sup>c</sup>	1.1	0.1	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Cobalt-60	pCi/g	1.7	— <sup>c</sup>	4.3	— <sup>c</sup>	0.0084	0.05	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Europium-152	pCi/g	9.2	— <sup>c</sup>	4.3	— <sup>c</sup>	—	0.1	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Europium-154	pCi/g	1.5	— <sup>c</sup>	4.3	— <sup>c</sup>	0.033	0.1	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Nickel-63	pCi/g	57	— <sup>c</sup>	4.3	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Plutonium-238	pCi/g	0.26	— <sup>c</sup>	4.3	— <sup>c</sup>	0.0038	1	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Plutonium-239/240	pCi/g	10	— <sup>c</sup>	4.3	— <sup>c</sup>	0.025	1	—	— <sup>c</sup>	—
118-C-3:2_Deep_Focused	Technetium-99	pCi/g	1.2	2.2	4.3	0.51	—	0.25	0,001	Scaled GWP SSL	Yes
118-C-3:2_Deep_Focused	Total beta radiostrontium	pCi/g	38	2,121	4.3	493	0.18	1	0,493	Scaled GWP SSL	No
118-C-3:3_Shallow_Focused	Aroclor-1254	µg/kg	5.1	— <sup>c</sup>	60	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Aroclor-1260	µg/kg	6.5	— <sup>c</sup>	60	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Benzo(a)anthracene	µg/kg	75	— <sup>c</sup>	60	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Benzo(a)pyrene	µg/kg	73	— <sup>c</sup>	60	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection* ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
118-C-3:3_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	59	— <sup>c</sup>	60	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	68	— <sup>c</sup>	60	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	65	— <sup>c</sup>	60	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Chrysene	µg/kg	100	— <sup>c</sup>	60	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Copper	µg/kg	38,300	7.69E+06	60	127,523	22,000	1,000	127,523	Scaled GWP SSL	No
118-C-3:3_Shallow_Focused	Di-n-butylphthalate	µg/kg	19	88,471	60	1,467	—	330	1,467	Scaled GWP SSL	No
118-C-3:3_Shallow_Focused	Fluoranthene	µg/kg	160	3.89E+08	60	6.45E+06	—	330	6,451,078	Scaled GWP SSL	No
118-C-3:3_Shallow_Focused	Hexavalent Chromium	µg/kg	540	6,000 <sup>e</sup>	60	6,000	—	1,000	6,000	— <sup>e</sup>	No
118-C-3:3_Shallow_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	52	— <sup>c</sup>	60	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-3:3_Shallow_Focused	Mercury	µg/kg	800	1.34E+07	60	222,734	13	200	222,734	Scaled GWP SSL	No
118-C-3:3_Shallow_Focused	Pyrene	µg/kg	170	3.89E+08	60	6.45E+06	—	330	6,451,078	Scaled GWP SSL	No
118-C-4_Shallow	Benzo(a)anthracene	µg/kg	41	— <sup>c</sup>	5.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-4_Shallow	Benzo(a)pyrene	µg/kg	44	— <sup>c</sup>	5.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-4_Shallow	Benzo(b)fluoranthene	µg/kg	46	— <sup>c</sup>	5.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-4_Shallow	Benzo(k)fluoranthene	µg/kg	45	— <sup>c</sup>	5.2	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
118-C-4_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	130	— <sup>c</sup>	5.2	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-4_Shallow	Chrysene	µg/kg	44	— <sup>c</sup>	5.2	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
118-C-4_Shallow	Di-n-butylphthalate	µg/kg	34	88,471	5.2	17,014	—	330	17,014	Scaled GWP SSL	No
118-C-4_Shallow	Fluoranthene	µg/kg	74	3.89E+08	5.2	7.48E+07	—	330	74,807,692	Scaled GWP SSL	No
118-C-4_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	19	— <sup>c</sup>	5.2	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
118-C-4_Shallow	Lead	µg/kg	20,100	— <sup>c</sup>	5.2	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
118-C-4_Shallow	Methylene chloride	µg/kg	12	14	5.2	2.6	—	5	5	RDL	Yes
118-C-4_Shallow	Pyrene	µg/kg	100	3.89E+08	5.2	7.48E+07	—	330	74,807,692	Scaled GWP SSL	No
118-C-4_Shallow	Toluene	µg/kg	1.7	4,437	5.2	853	—	5	0,853	Scaled GWP SSL	No
120-B-1_Shallow_Focused	Aroclor-1221	µg/kg	9.8	17	11	1.6	—	16.5	16.5	RDL	No
120-B-1_Shallow_Focused	Aroclor-1260	µg/kg	170	— <sup>c</sup>	11	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
120-B-1_Shallow_Focused	Barium	µg/kg	135,000	3.89E+08	11	3.67E+07	132,000	2,000	36,698,113	Scaled GWP SSL	No
120-B-1_Shallow_Focused	Boron	µg/kg	8,100	348,488	11	32,876	3,890	2,000	32,876	Scaled GWP SSL	No
120-B-1_Shallow_Focused	Chromium	µg/kg	273,000	— <sup>c</sup>	11	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
120-B-1_Shallow_Focused	Fluoride	µg/kg	3,800	— <sup>c</sup>	11	— <sup>c</sup>	2,810	5,000	—	— <sup>c</sup>	—
120-B-1_Shallow_Focused	Hexavalent Chromium	µg/kg	380	6,000 <sup>e</sup>	11	6,000	—	1,000	6,000	— <sup>e</sup>	No
120-B-1_Shallow_Focused	Lead	µg/kg	15,400	— <sup>c</sup>	11	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
120-B-1_Shallow_Focused	Mercury	µg/kg	90	1.34E+07	11	1.27E+06	13	200	1,267,062	Scaled GWP SSL	No
120-B-1_Shallow_Focused	Molybdenum	µg/kg	2,300	563,885	11	53,197	470	2,000	53,197	Scaled GWP SSL	No
120-B-1_Shallow_Focused	Silver	µg/kg	230	27,530	11	2,597	167	200	2,597	Scaled GWP SSL	No
120-B-1_Shallow_Focused	Zinc	µg/kg	72,200	3.89E+08	11	3.67E+07	67,800	1,000	36,698,113	Scaled GWP SSL	No
126-B-3_Shallow	1,2,4-Trichlorobenzene	µg/kg	52	330	87	3.8	—	330	330	RDL	No
126-B-3_Shallow	2-Methylnaphthalene	µg/kg	122	2,896	87	33	—	330	330	RDL	No
126-B-3_Shallow	Acenaphthene	µg/kg	55	84,728	87	969	—	330	0,969	Scaled GWP SSL	No
126-B-3_Shallow	Anthracene	µg/kg	149	4.27E+07	87	488,282	—	330	488,282	Scaled GWP SSL	No
126-B-3_Shallow	Aroclor-1260	µg/kg	17	— <sup>c</sup>	87	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
126-B-3_Shallow	Benzo(a)anthracene	µg/kg	348	— <sup>c</sup>	87	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
126-B-3_Shallow	Benzo(a)pyrene	µg/kg	269	— <sup>c</sup>	87	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
126-B-3_Shallow	Benzo(b)fluoranthene	µg/kg	191	— <sup>c</sup>	87	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
126-B-3_Shallow	Benzo(k)fluoranthene	µg/kg	244	— <sup>c</sup>	87	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
126-B-3_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	55	— <sup>c</sup>	87	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
126-B-3_Shallow	Boron	µg/kg	4,975	348,488	87	3,987	3,890	2,000	3,987	Scaled GWP SSL	Yes
126-B-3_Shallow	Carbazole	µg/kg	75	537	87	6.1	—	330	330	RDL	No
126-B-3_Shallow	Chrysene	µg/kg	122	— <sup>c</sup>	87	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
126-B-3_Shallow	Copper	µg/kg	23,531	7.69E+06	87	87,982	22,000	1,000	87,982	Scaled GWP SSL	No
126-B-3_Shallow	Dibenz[a,h]anthracene	µg/kg	88	— <sup>c</sup>	87	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
126-B-3_Shallow	Dibenzofuran	µg/kg	99	3,353	87	38	—	330	330	RDL	No



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg · m or pCi · m / kg · g · m)	Site Width In Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length In Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
126-B-3_Shallow	Di-n-butylphthalate	µg/kg	35	88,471	87	1,012	—	330	1,012	Scaled GWP SSL	No
126-B-3_Shallow	Fluoranthene	µg/kg	204	3.89E+08	87	4.45E+06	—	330	4,450,801	Scaled GWP SSL	No
126-B-3_Shallow	Fluorene	µg/kg	71	97,154	87	1,112	—	330	1,112	Scaled GWP SSL	No
126-B-3_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	162	— <sup>c</sup>	87	— <sup>c</sup>	—	330	— <sup>c</sup>	— <sup>c</sup>	—
126-B-3_Shallow	Mercury	µg/kg	28	1.34E+07	87	153,671	13	200	153,671	Scaled GWP SSL	No
126-B-3_Shallow	Molybdenum	µg/kg	1,227	563,885	87	6,452	470	2,000	6,452	Scaled GWP SSL	No
126-B-3_Shallow	Naphthalene	µg/kg	118	6,798	87	78	—	330	330	RDL	No
126-B-3_Shallow	n-Nitrosodiphenylamine	µg/kg	103	819	87	9.4	—	330	330	RDL	No
126-B-3_Shallow	Pyrene	µg/kg	180	3.89E+08	87	4.45E+06	—	330	4,450,801	Scaled GWP SSL	No
128-B-2_Shallow	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	16	— <sup>c</sup>	95	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
128-B-2_Shallow	Aroclor-1254	µg/kg	68	— <sup>c</sup>	95	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
128-B-2_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	206	— <sup>c</sup>	95	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-B-2_Shallow	Butylbenzylphthalate	µg/kg	17	60,438	95	636	—	330	0,636	Scaled GWP SSL	No
128-B-2_Shallow	Chlordane	µg/kg	24	1.42E+06	95	14,958	—	1.7	14,958	Scaled GWP SSL	No
128-B-2_Shallow	Di-n-butylphthalate	µg/kg	36	88,471	95	931	—	330	0,931	Scaled GWP SSL	No
128-B-2_Shallow	Fluoranthene	µg/kg	22	3.89E+08	95	4.09E+06	—	330	4,094,737	Scaled GWP SSL	No
128-B-2_Shallow	Lead	µg/kg	32,438	— <sup>c</sup>	95	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
128-B-2_Shallow	Mercury	µg/kg	22	1.34E+07	95	141,377	13	200	141,377	Scaled GWP SSL	No
128-B-2_Shallow	Molybdenum	µg/kg	1,077	563,885	95	5,936	470	2,000	5,936	Scaled GWP SSL	No
128-B-2_Shallow	Phenol	µg/kg	22	7,909	95	83	—	330	330	RDL	No
128-B-2_Shallow	Pyrene	µg/kg	31	3.89E+08	95	4.09E+06	—	330	4,094,737	Scaled GWP SSL	No
128-B-2_Shallow	Toluene	µg/kg	4.0	4,437	95	47	—	5	0,047	Scaled GWP SSL	No
128-B-3_Shallow_1	Aroclor-1254	µg/kg	190	— <sup>c</sup>	15	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Benzo(a)anthracene	µg/kg	24	— <sup>c</sup>	15	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Benzo(a)pyrene	µg/kg	17	— <sup>c</sup>	15	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Benzo(b)fluoranthene	µg/kg	32	— <sup>c</sup>	15	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Benzo(k)fluoranthene	µg/kg	30	— <sup>c</sup>	15	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Bis(2-ethylhexyl) phthalate	µg/kg	51	— <sup>c</sup>	15	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Chrysene	µg/kg	38	— <sup>c</sup>	15	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
128-B-3_Shallow_1	Di-n-butylphthalate	µg/kg	22	88,471	15	5,745	—	330	5,745	Scaled GWP SSL	No
128-B-3_Shallow_1	Endrin	µg/kg	2.4	1,219	15	79	—	3	0,079	Scaled GWP SSL	No
128-B-3_Shallow_1	Fluoranthene	µg/kg	20	3.89E+08	15	2.53E+07	—	330	25,259,740	Scaled GWP SSL	No
128-B-3_Shallow_1	Mercury	µg/kg	63	1.34E+07	15	872,134	13	200	872,134	Scaled GWP SSL	No
128-B-3_Shallow_1	Methylene chloride	µg/kg	8.2	14	15	0.88	—	5	5	RDL	Yes
128-B-3_Shallow_1	Pyrene	µg/kg	31	3.89E+08	15	2.53E+07	—	330	25,259,740	Scaled GWP SSL	No
128-B-3_Shallow_2	Aroclor-1254	µg/kg	17	— <sup>c</sup>	46	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
128-B-3_Shallow_2	Boron	µg/kg	6,364	348,488	46	7,626	3,890	2,000	7,626	Scaled GWP SSL	No
128-B-3_Shallow_2	Chromium	µg/kg	36,702	— <sup>c</sup>	46	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
128-B-3_Shallow_2	Copper	µg/kg	38,045	7.69E+06	46	168,263	22,000	1,000	168,263	Scaled GWP SSL	No
128-B-3_Shallow_2	Hexavalent Chromium	µg/kg	544	6,000 <sup>e</sup>	46	6,000	—	1,000	6,000	— <sup>e</sup>	No
128-B-3_Shallow_2	Lead	µg/kg	40,282	— <sup>c</sup>	46	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
128-B-3_Shallow_2	Mercury	µg/kg	72	1.34E+07	46	293,892	13	200	293,892	Scaled GWP SSL	No
128-B-3_Shallow_2	Methylene chloride	µg/kg	12	14	46	0.30	—	5	5	RDL	Yes
128-B-3_Shallow_2	Molybdenum	µg/kg	870	563,885	46	12,339	470	2,000	12,339	Scaled GWP SSL	No
128-B-3_Shallow_2	Silver	µg/kg	241	27,530	46	602	167	200	0,602	Scaled GWP SSL	No
128-B-3_Shallow_2	Total petroleum hydrocarbons	µg/kg	431,000	1.00E+06 <sup>d</sup>	46	1000000	—	—	1,000,000	— <sup>d</sup>	No
128-B-3_Shallow_2	Zinc	µg/kg	109,940	3.89E+08	46	8.51E+06	67,800	1,000	8,512,035	Scaled GWP SSL	No
128-B-3_Shallow_3	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	12	— <sup>c</sup>	40	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
128-B-3_Shallow_3	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	12	— <sup>c</sup>	40	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Acetone	µg/kg	15	17,372	40	436	—	20	0,436	Scaled GWP SSL	No
128-B-3_Shallow_3	Aldrin	µg/kg	0.37	9,878	40	248	—	1.7	0,248	Scaled GWP SSL	No
128-B-3_Shallow_3	Aroclor-1254	µg/kg	29	— <sup>c</sup>	40	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Aroclor-1260	µg/kg	6.9	— <sup>c</sup>	40	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
128-B-3_Shallow_3	Benzo(a)anthracene	µg/kg	47	— <sup>c</sup>	40	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Benzo(a)pyrene	µg/kg	53	— <sup>c</sup>	40	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Benzo(b)fluoranthene	µg/kg	55	— <sup>c</sup>	40	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Benzo(k)fluoranthene	µg/kg	43	— <sup>c</sup>	40	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Bis(2-ethylhexyl) phthalate	µg/kg	64	— <sup>c</sup>	40	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Cadmium	µg/kg	590	1,256	40	32	1,510	50	1,510	Background Value	No
128-B-3_Shallow_3	Chlordane	µg/kg	0.33	1.42E+06	40	35,705	—	1.7	35,705	Scaled GWP SSL	No
128-B-3_Shallow_3	Chrysene	µg/kg	100	— <sup>c</sup>	40	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Dibenz[a,h]anthracene	µg/kg	56	— <sup>c</sup>	40	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Di-n-butylphthalate	µg/kg	29	88,471	40	2,223	—	330	2,223	Scaled GWP SSL	No
128-B-3_Shallow_3	Fluoranthene	µg/kg	62	3.89E+08	40	9.77E+06	—	330	9,773,869	Scaled GWP SSL	No
128-B-3_Shallow_3	Hexavalent Chromium	µg/kg	293	6,000 <sup>e</sup>	40	6,000	—	1,000	6,000	— <sup>e</sup>	No
128-B-3_Shallow_3	Indeno(1,2,3-cd)pyrene	µg/kg	50	— <sup>c</sup>	40	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Mercury	µg/kg	48	1.34E+07	40	337,459	13	200	337,459	Scaled GWP SSL	No
128-B-3_Shallow_3	Methoxychlor	µg/kg	3.6	— <sup>c</sup>	40	— <sup>c</sup>	—	20	—	— <sup>c</sup>	—
128-B-3_Shallow_3	Methylene chloride	µg/kg	16	14	40	0.34	—	5	5	RDL	Yes
128-B-3_Shallow_3	Molybdenum	µg/kg	4,700	563,885	40	14,168	470	2,000	14,168	Scaled GWP SSL	No
128-B-3_Shallow_3	Pyrene	µg/kg	87	3.89E+08	40	9.77E+06	—	330	9,773,869	Scaled GWP SSL	No
128-B-3_Shallow_3	Silver	µg/kg	300	27,530	40	692	167	200	0,692	Scaled GWP SSL	No
128-B-3_Shallow_3	Toluene	µg/kg	1.8	4,437	40	111	—	5	0,111	Scaled GWP SSL	No
128-B-3_Shallow_3	Total petroleum hydrocarbons	µg/kg	258,000	1.00E+06 <sup>d</sup>	40	1000000	—	—	1,000,000	— <sup>d</sup>	No
128-B-3_Shallow_3	Xylenes (total)	µg/kg	2.5	16,314	40	410	—	1	0,410	Scaled GWP SSL	No
128-C-1_Shallow	Antimony	µg/kg	858	1.19E+07	45	262,067	130	600	262,067	Scaled GWP SSL	No
128-C-1_Shallow	Aroclor-1254	µg/kg	140	— <sup>c</sup>	45	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
128-C-1_Shallow	Aroclor-1260	µg/kg	11	— <sup>c</sup>	45	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
128-C-1_Shallow	Benzo(a)anthracene	µg/kg	29	— <sup>c</sup>	45	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-C-1_Shallow	Benzo(a)pyrene	µg/kg	31	— <sup>c</sup>	45	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-C-1_Shallow	Benzo(b)fluoranthene	µg/kg	32	— <sup>c</sup>	45	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-C-1_Shallow	Benzo(k)fluoranthene	µg/kg	30	— <sup>c</sup>	45	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
128-C-1_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	1,682	— <sup>c</sup>	45	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-C-1_Shallow	Boron	µg/kg	9,818	348,488	45	7,676	3,890	2,000	7,676	Scaled GWP SSL	Yes
128-C-1_Shallow	Cadmium	µg/kg	990	1,256	45	28	1,510	50	1,510	Background Value	No
128-C-1_Shallow	Chrysene	µg/kg	38	— <sup>c</sup>	45	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
128-C-1_Shallow	Copper	µg/kg	48,008	7.69E+06	45	169,375	22,000	1,000	169,375	Scaled GWP SSL	No
128-C-1_Shallow	Di-n-butylphthalate	µg/kg	40	88,471	45	1,949	—	330	1,949	Scaled GWP SSL	No
128-C-1_Shallow	Fluoranthene	µg/kg	53	3.89E+08	45	8.57E+06	—	330	8,568,282	Scaled GWP SSL	No
128-C-1_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	21	— <sup>c</sup>	45	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-C-1_Shallow	Lead	µg/kg	30,352	— <sup>c</sup>	45	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
128-C-1_Shallow	Mercury	µg/kg	50	1.34E+07	45	295,834	13	200	295,834	Scaled GWP SSL	No
128-C-1_Shallow	Molybdenum	µg/kg	1,900	563,885	45	12,420	470	2,000	12,420	Scaled GWP SSL	No
128-C-1_Shallow	Pyrene	µg/kg	43	3.89E+08	45	8.57E+06	—	330	8,568,282	Scaled GWP SSL	No
128-C-1_Shallow	Selenium	µg/kg	1,300	9,013	45	199	780	1,000	1,000	RDL	Yes
128-C-1_Shallow	Silver	µg/kg	6,600	27,530	45	606	167	200	0,606	Scaled GWP SSL	Yes
128-C-1_Shallow	Zinc	µg/kg	70,414	3.89E+08	45	8.57E+06	67,800	1,000	8,568,282	Scaled GWP SSL	No
128-C-1_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	36	— <sup>c</sup>	37	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
128-C-1_Shallow_Focused	Cadmium	µg/kg	1,797	1,256	37	34	1,510	50	1,510	Background Value	Yes
128-C-1_Shallow_Focused	Chromium	µg/kg	19,600	— <sup>c</sup>	37	— <sup>c</sup>	18,500	1,000	—	— <sup>c</sup>	—
128-C-1_Shallow_Focused	Lead	µg/kg	61,300	— <sup>c</sup>	37	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
128-C-1_Shallow_Focused	Mercury	µg/kg	200	1.34E+07	37	362,996	13	200	362,996	Scaled GWP SSL	No
128-C-1_Shallow_Focused	Total petroleum hydrocarbons	µg/kg	44,700	1.00E+06 <sup>d</sup>	37	1000000	—	—	1,000,000	— <sup>d</sup>	No
1607-B1_Shallow_Focused	4,4'-DDD (Dichlorodiphenyldichloroethane)	µg/kg	1.0	836,540	6.3	132,784	—	3.3	132,784	Scaled GWP SSL	No
1607-B1_Shallow_Focused	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	21	— <sup>c</sup>	6.3	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater  
(With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg · m or pCi · m / kg · g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
1607-B1_Shallow_Focused	Alpha-BHC	µg/kg	0.52	1.7	6.3	0.26	--	1.7	1.7	RDL	No
1607-B1_Shallow_Focused	Aroclor-1260	µg/kg	11	-- <sup>c</sup>	6.3	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	Barium	µg/kg	138,000	3.89E+08	6.3	6.17E+07	132,000	2,000	61,746,032	Scaled GWP SSL	No
1607-B1_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	98	-- <sup>c</sup>	6.3	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
1607-B1_Shallow_Focused	Di-n-butylphthalate	µg/kg	26	88,471	6.3	14,043	--	330	14,043	Scaled GWP SSL	No
1607-B1_Shallow_Focused	Hexavalent Chromium	µg/kg	300	6,000 <sup>e</sup>	6.3	6,000	--	1,000	6,000	-- <sup>e</sup>	No
1607-B1_Shallow_Focused	Mercury	µg/kg	230	1.34E+07	6.3	2.13E+06	13	200	2,131,883	Scaled GWP SSL	No
1607-B1_Shallow_Focused	Molybdenum	µg/kg	570	563,885	6.3	89,505	470	2,000	89,505	Scaled GWP SSL	No
1607-B1_Shallow_Focused	Zinc	µg/kg	93,900	3.89E+08	6.3	6.17E+07	67,800	1,000	61,746,032	Scaled GWP SSL	No
1607-B10_Shallow	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	4.5	-- <sup>c</sup>	15	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
1607-B10_Shallow	Aroclor-1254	µg/kg	57	-- <sup>c</sup>	15	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
1607-B10_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	22	-- <sup>c</sup>	15	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
1607-B10_Shallow	Chromium	µg/kg	25,200	-- <sup>c</sup>	15	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
1607-B10_Shallow	Fluoranthene	µg/kg	30	3.89E+08	15	2.66E+07	--	330	26,643,836	Scaled GWP SSL	No
1607-B10_Shallow	Lead	µg/kg	17,900	-- <sup>c</sup>	15	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
1607-B10_Shallow	Mercury	µg/kg	380	1.34E+07	15	919,922	13	200	919,922	Scaled GWP SSL	No
1607-B10_Shallow	Pyrene	µg/kg	27	3.89E+08	15	2.66E+07	--	330	26,643,836	Scaled GWP SSL	No
1607-B11_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	680	-- <sup>c</sup>	10	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
1607-B11_Shallow	Lead	µg/kg	10,300	-- <sup>c</sup>	10	-- <sup>c</sup>	10,200	5,000	--	-- <sup>c</sup>	--
1607-B11_Shallow	Mercury	µg/kg	30	1.34E+07	10	1.32E+06	13	200	1,316,751	Scaled GWP SSL	No
1607-B2:1_Shallow	2,4,5-T(2,4,5-Trichlorophenoxyacetic acid)	µg/kg	47	941	36	26	--	20	0,026	Scaled GWP SSL	Yes
1607-B2:1_Shallow	2,4,5-TP(2-(2,4,5-Trichlorophenoxy)propionic acid)Silvex	µg/kg	23	415	36	12	--	20	20	RDL	Yes
1607-B2:1_Shallow	2,4-D(2,4-Dichlorophenoxyacetic acid)	µg/kg	110	400	36	11	--	400	400	RDL	No
1607-B2:1_Shallow	2,4-DB(4-(2,4-Dichlorophenoxy)butanoic acid)	µg/kg	250	705	36	20	--	100	100	RDL	Yes
1607-B2:1_Shallow	2-Methylnaphthalene	µg/kg	154	2,896	36	81	--	330	330	RDL	No
1607-B2:1_Shallow	Acetone	µg/kg	15	17,372	36	487	--	20	0,487	Scaled GWP SSL	No
1607-B2:1_Shallow	Antimony	µg/kg	457	1.19E+07	36	333,272	130	600	333,272	Scaled GWP SSL	No
1607-B2:1_Shallow	Barium	µg/kg	386,965	3.89E+08	36	1.09E+07	132,000	2,000	10,896,359	Scaled GWP SSL	No
1607-B2:1_Shallow	Boron	µg/kg	19,810	348,488	36	9,762	3,890	2,000	9,762	Scaled GWP SSL	Yes
1607-B2:1_Shallow	Chromium	µg/kg	19,106	-- <sup>c</sup>	36	-- <sup>c</sup>	18,500	1,000	--	-- <sup>c</sup>	--
1607-B2:1_Shallow	Copper	µg/kg	30,171	7.69E+06	36	215,396	22,000	1,000	215,396	Scaled GWP SSL	No
1607-B2:1_Shallow	Dibenzofuran	µg/kg	34	3,353	36	94	--	330	330	RDL	No
1607-B2:1_Shallow	Diethylphthalate	µg/kg	26	63,829	36	1,788	--	330	1,788	Scaled GWP SSL	No
1607-B2:1_Shallow	Di-n-butylphthalate	µg/kg	21	88,471	36	2,478	--	330	2,478	Scaled GWP SSL	No
1607-B2:1_Shallow	Dinoseb(2-secButyl-4,6-dinitrophenol)	µg/kg	27	1,082	36	30	--	10	0,030	Scaled GWP SSL	No
1607-B2:1_Shallow	Endosulfan I	µg/kg	1.7	7,192	36	201	--	3	0,201	Scaled GWP SSL	No
1607-B2:1_Shallow	Endrin	µg/kg	1.7	1,219	36	34	--	3	0,034	Scaled GWP SSL	No
1607-B2:1_Shallow	Hexavalent Chromium	µg/kg	269	6,000 <sup>e</sup>	36	6,000	--	1,000	6,000	-- <sup>e</sup>	No
1607-B2:1_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	24	-- <sup>c</sup>	36	-- <sup>c</sup>	--	330	--	-- <sup>c</sup>	--
1607-B2:1_Shallow	Manganese	µg/kg	577,831	3.89E+08	36	1.09E+07	512,000	5,000	10,896,359	Scaled GWP SSL	No
1607-B2:1_Shallow	Mercury	µg/kg	20	1.34E+07	36	376,215	13	200	376,215	Scaled GWP SSL	No
1607-B2:1_Shallow	Molybdenum	µg/kg	1,097	563,885	36	15,795	470	2,000	15,795	Scaled GWP SSL	No
1607-B2:1_Shallow	Naphthalene	µg/kg	107	6,798	36	190	--	330	330	RDL	No
1607-B2:1_Shallow	Nickel	µg/kg	20,845	3.89E+08	36	1.09E+07	19,100	4,000	10,896,359	Scaled GWP SSL	No
1607-B2:2_Shallow	2-Methylnaphthalene	µg/kg	19	2,896	240	12	--	330	330	RDL	No
1607-B2:2_Shallow	4,4'-DDE (Dichlorodiphenyldichloroethylene)	µg/kg	18	-- <sup>c</sup>	240	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
1607-B2:2_Shallow	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	17	-- <sup>c</sup>	240	-- <sup>c</sup>	--	3.3	--	-- <sup>c</sup>	--
1607-B2:2_Shallow	Alpha-Chlordane	µg/kg	0.87	1.42E+06	240	5,919	--	17	5,919	Scaled GWP SSL	No
1607-B2:2_Shallow	Antimony	µg/kg	510	1.19E+07	240	49,554	130	600	49,554	Scaled GWP SSL	No
1607-B2:2_Shallow	Aroclor-1254	µg/kg	330	-- <sup>c</sup>	240	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
1607-B2:2_Shallow	Aroclor-1260	µg/kg	6.7	-- <sup>c</sup>	240	-- <sup>c</sup>	--	17	--	-- <sup>c</sup>	--
1607-B2:2_Shallow	Benzo(a)anthracene	µg/kg	41	-- <sup>c</sup>	240	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--
1607-B2:2_Shallow	Benzo(a)pyrene	µg/kg	33	-- <sup>c</sup>	240	-- <sup>c</sup>	--	15	--	-- <sup>c</sup>	--



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater  
(With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> (µg/kg or pCi/g)	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
1607-B2:2_Shallow	Benzo(b)fluoranthene	µg/kg	41	— <sup>c</sup>	240	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Benzo(k)fluoranthene	µg/kg	35	— <sup>c</sup>	240	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
1607-B2:2_Shallow	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	µg/kg	1.9	3.8	240	0.016	—	1.7	1.7	RDL	Yes
1607-B2:2_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	2,681	— <sup>c</sup>	240	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Boron	µg/kg	4,666	348,488	240	1,451	3,890	2,000	3,890	Background Value	Yes
1607-B2:2_Shallow	Chlordane	µg/kg	0.43	1.42E+06	240	5,919	—	1.7	5,919	Scaled GWP SSL	No
1607-B2:2_Shallow	Chrysene	µg/kg	64	— <sup>c</sup>	240	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Copper	µg/kg	51,480	7.69E+06	240	32,027	22,000	1,000	32,027	Scaled GWP SSL	Yes
1607-B2:2_Shallow	Dibenz(a,h)anthracene	µg/kg	22	— <sup>c</sup>	240	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Di-n-butylphthalate	µg/kg	33	88,471	240	368	—	330	0,368	Scaled GWP SSL	No
1607-B2:2_Shallow	Endosulfan I	µg/kg	6.9	7,192	240	30	—	3	0,030	Scaled GWP SSL	No
1607-B2:2_Shallow	Endosulfan II	µg/kg	3.4	7,192	240	30	—	3	0,030	Scaled GWP SSL	No
1607-B2:2_Shallow	Fluoranthene	µg/kg	79	3.89E+08	240	1.62E+06	—	330	1,620,158	Scaled GWP SSL	No
1607-B2:2_Shallow	Heptachlor epoxide	µg/kg	0.60	— <sup>c</sup>	240	— <sup>c</sup>	—	2	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Hexavalent Chromium	µg/kg	436	6,000 <sup>e</sup>	240	6,000	—	1,000	6,000	— <sup>e</sup>	No
1607-B2:2_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	25	— <sup>c</sup>	240	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Lead	µg/kg	10,463	— <sup>c</sup>	240	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Mercury	µg/kg	240	1.34E+07	240	55,939	13	200	55,939	Scaled GWP SSL	No
1607-B2:2_Shallow	Methoxychlor	µg/kg	15	— <sup>c</sup>	240	— <sup>c</sup>	—	20	—	— <sup>c</sup>	—
1607-B2:2_Shallow	Naphthalene	µg/kg	17	6,798	240	28	—	330	330	RDL	No
1607-B2:2_Shallow	Phenol	µg/kg	17	7,909	240	33	—	330	330	RDL	No
1607-B2:2_Shallow	Pyrene	µg/kg	66	3.89E+08	240	1.62E+06	—	330	1,620,158	Scaled GWP SSL	No
1607-B2:2_Shallow	Strontium	µg/kg	47,600	3.89E+08	240	1.62E+06	—	1,000	1,620,158	Scaled GWP SSL	No
1607-B2:2_Shallow	Total beta radiostromium	pCi/g	0.90	2,121	240	8.8	0.18	1	0,009	Scaled GWP SSL	No
1607-B7_Shallow	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	µg/kg	2.1	3.8	12	0.31	—	1.7	1.7	RDL	Yes
1607-B7_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	31	— <sup>c</sup>	12	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
1607-B7_Shallow	Lead	µg/kg	43,000	— <sup>c</sup>	12	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
1607-B8_Shallow	4,4'-DDT (Dichlorodiphenyltrichloroethane)	µg/kg	27	— <sup>c</sup>	14	— <sup>c</sup>	—	3.3	—	— <sup>c</sup>	—
1607-B8_Shallow	Aroclor-1254	µg/kg	380	— <sup>c</sup>	14	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
1607-B8_Shallow	Lead	µg/kg	166,000	— <sup>c</sup>	14	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
1607-B8_Shallow	Mercury	µg/kg	103	1.34E+07	14	939,221	13	200	939,221	Scaled GWP SSL	No
1607-B9_Shallow	Anthracene	µg/kg	23	4.27E+07	28	1.52E+06	—	330	1,524,137	Scaled GWP SSL	No
1607-B9_Shallow	Benzo(a)anthracene	µg/kg	163	— <sup>c</sup>	28	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
1607-B9_Shallow	Benzo(a)pyrene	µg/kg	78	— <sup>c</sup>	28	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
1607-B9_Shallow	Benzo(b)fluoranthene	µg/kg	115	— <sup>c</sup>	28	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
1607-B9_Shallow	Benzo(k)fluoranthene	µg/kg	115	— <sup>c</sup>	28	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
1607-B9_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	41	— <sup>c</sup>	28	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
1607-B9_Shallow	Carbazole	µg/kg	25	537	28	19	—	330	330	RDL	No
1607-B9_Shallow	Chrysene	µg/kg	213	— <sup>c</sup>	28	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
1607-B9_Shallow	Dieldrin	µg/kg	4.4	166	28	5.9	—	3.3	0,006	Scaled GWP SSL	No
1607-B9_Shallow	Di-n-butylphthalate	µg/kg	96	88,471	28	3,160	—	330	3,160	Scaled GWP SSL	No
1607-B9_Shallow	Fluoranthene	µg/kg	314	3.89E+08	28	1.39E+07	—	330	13,892,857	Scaled GWP SSL	No
1607-B9_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	38	— <sup>c</sup>	28	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
1607-B9_Shallow	Lead	µg/kg	10,831	— <sup>c</sup>	28	— <sup>c</sup>	10,200	5,000	—	— <sup>c</sup>	—
1607-B9_Shallow	Mercury	µg/kg	68	1.34E+07	28	479,674	13	200	479,674	Scaled GWP SSL	No
1607-B9_Shallow	Pyrene	µg/kg	272	3.89E+08	28	1.39E+07	—	330	13,892,857	Scaled GWP SSL	No
600-232_Shallow	Aroclor-1254	µg/kg	23	— <sup>c</sup>	148	— <sup>c</sup>	—	17	—	— <sup>c</sup>	—
600-232_Shallow	Benzo(a)anthracene	µg/kg	143	— <sup>c</sup>	148	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-232_Shallow	Benzo(a)pyrene	µg/kg	91	— <sup>c</sup>	148	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-232_Shallow	Benzo(b)fluoranthene	µg/kg	125	— <sup>c</sup>	148	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-232_Shallow	Benzo(k)fluoranthene	µg/kg	117	— <sup>c</sup>	148	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-232_Shallow	Bis(2-ethylhexyl) phthalate	µg/kg	36	— <sup>c</sup>	148	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—



Table 7-4. Comparison of EPCs from 100-BC Operable Unit Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

Waste Site/Decision Unit	Analyte Name	Units	Exposure Point Concentration (µg/kg or pCi/g)	Unit -Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection <sup>a</sup> ( $\frac{\mu g}{kg} \cdot m$ or $\frac{pCi}{g} \cdot m$ )	Site Width in Direction of Groundwater Flow <sup>b</sup> (m)	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow (µg/kg or pCi/g)	Hanford Site 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected GWPSSL (µg/kg or pCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
600-232_Shallow	Carbazole	µg/kg	28	537	148	3.6	—	330	330	RDL	No
600-232_Shallow	Chrysene	µg/kg	178	— <sup>c</sup>	148	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
600-232_Shallow	Dibenz[a,h]anthracene	µg/kg	18	— <sup>c</sup>	148	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
600-232_Shallow	Di-n-octylphthalate	µg/kg	28	— <sup>c</sup>	148	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
600-232_Shallow	Fluoranthene	µg/kg	257	3.89E+08	148	2.63E+06	—	330	2,631,935	Scaled GWP SSL	No
600-232_Shallow	Indeno(1,2,3-cd)pyrene	µg/kg	43	— <sup>c</sup>	148	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
600-232_Shallow	Mercury	µg/kg	20	1.34E+07	148	90,872	13	200	90,872	Scaled GWP SSL	No
600-232_Shallow	Pentachlorophenol	µg/kg	150	330	148	2.2	—	330	330	RDL	No
600-232_Shallow	Pyrene	µg/kg	227	3.89E+08	148	2.63E+06	—	330	2,631,935	Scaled GWP SSL	No
600-232_Shallow	Total petroleum hydrocarbons	µg/kg	10,059	1.00E+06 <sup>d</sup>	148	1000000	—	—	1,000,000	— <sup>d</sup>	No
600-233_Shallow_Focused	Anthracene	µg/kg	47	4.27E+07	2.1	2.03E+07	—	330	20,321,821	Scaled GWP SSL	No
600-233_Shallow_Focused	Benzo(a)anthracene	µg/kg	290	— <sup>c</sup>	2.1	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Benzo(a)pyrene	µg/kg	180	— <sup>c</sup>	2.1	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Benzo(b)fluoranthene	µg/kg	220	— <sup>c</sup>	2.1	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Benzo(k)fluoranthene	µg/kg	180	— <sup>c</sup>	2.1	— <sup>c</sup>	—	15	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Bis(2-ethylhexyl) phthalate	µg/kg	140	— <sup>c</sup>	2.1	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Butylbenzylphthalate	µg/kg	28	60,438	2.1	28,780	—	330	28,780	Scaled GWP SSL	No
600-233_Shallow_Focused	Chrysene	µg/kg	340	— <sup>c</sup>	2.1	— <sup>c</sup>	—	100	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Dibenz[a,h]anthracene	µg/kg	61	— <sup>c</sup>	2.1	— <sup>c</sup>	—	30	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Di-n-butylphthalate	µg/kg	68	88,471	2.1	42,129	—	330	42,129	Scaled GWP SSL	No
600-233_Shallow_Focused	Fluoranthene	µg/kg	690	3.89E+08	2.1	1.85E+08	—	330	185,238,095	Scaled GWP SSL	No
600-233_Shallow_Focused	Indeno(1,2,3-cd)pyrene	µg/kg	110	— <sup>c</sup>	2.1	— <sup>c</sup>	—	330	—	— <sup>c</sup>	—
600-233_Shallow_Focused	Pyrene	µg/kg	510	3.89E+08	2.1	1.85E+08	—	330	185,238,095	Scaled GWP SSL	No
600-233_Shallow_Focused	Selenium	µg/kg	3,000	9,013	2.1	4,292	780	1,000	4,292	Scaled GWP SSL	No

Notes:

a. ECF-HANFORD-15-0129. A 70:30 source distribution is used for analytes with Kd ≥ 2 mL/g; a 100:0 source distribution is used for analytes with Kd < 2 mL/g. These soil screening levels protective of groundwater and protective of surface water are provided on a unit-length basis. To apply these soil screening levels, divide the listed value by a representative length across the waste site decision unit in the general direction of groundwater flow to obtain the soil screening level for evaluation use. (Note that this scaling is not applicable to soil cleanup levels for arsenic, hexavalent chromium, or TPH-diesel.)

b. ECF-100-BC5-15-0119, *Determination of Representative Lineal Dimensions for 1000BC Operable Unit Waste Site Decision Units for Use in Soil Screening Level and Preliminary Remedial Goal Comparisons to Exposure Point Concentrations*.

c. The calculated soil screening level for the analyte is considered non-representative because: (1) breakthrough is simulated within 1,000 years for some soil columns while other soil columns (a majority) show no breakthrough (breakthrough defined as concentrations exceeding 1E-04 µg/L or activity exceeding 1E-04 pCi/L).

d. The soil screening level for Total Petroleum Hydrocarbons is a default screening level obtained from WAC 173-340-900, Table 747-5, "Residual Saturation Screening Levels for TPH."

e. The soil screening level for hexavalent chromium is set to 6,000 µg/kg based on the evaluation in ECF-Hanford-11-0165; this value is not dependent on waste site size.

f. No Value Required. Uranium is not modeled because uranium was not identified in the groundwater risk assessment as a COC.

g. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and summing to provide a mass-based total uranium exposure point concentration (identified as Total\_U\_Isotopes), as described in ECF-100NR1-12-0041, *Computation of Exposure Point Concentrations for the 100-NR-1 Source Operable Unit*.

h. A drinking water standard is not available.

— = Not applicable or no value







Table 7-6. Evaluation of 100-BC OU Waste Site Decision Units with EPCs Greater than Groundwater Protection Soil Screening Levels

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Exposure Point Concentration (µg/kg or µCi/g)	Selected GWP SSL (µg/kg or µCi/g)	Selected GWP SSL Basis	Is EPC > Soil Screening Level Protective of Groundwater?
100-B-1_Shallow_2	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	6.8	1.7	RDL	Yes <sup>a</sup>
100-B-1_Shallow_2	non-Rad	Heptachlor	76-44-8	5.5	2.0	RDL	Yes <sup>a</sup>
100-B-14.2_Shallow_2	non-Rad	Pentachlorophenol	87-86-5	1,900	330	RDL	Yes <sup>a</sup>
100-B-18_Shallow_Focused	non-Rad	Boron	7440-42-8	34,200	17,690	Scaled GWP SSL	Yes <sup>d</sup>
100-B-18_Shallow_Focused	non-Rad	Cadmium	7440-43-9	13,200	1,510	Background Value	Yes <sup>a</sup>
100-B-18_Shallow_Focused	non-Rad	Naphthalene	91-20-3	440	345	Scaled GWP SSL	Yes <sup>f</sup>
100-B-19_Shallow_2	non-Rad	Selenium	7782-49-2	1,280	780	Background Value	Yes <sup>a</sup>
100-B-19_Shallow_Focused	non-Rad	Iron	7439-89-6	3.96E+07	3.26E+07	Background Value	Yes <sup>a</sup>
100-B-21.4_Shallow	non-Rad	Selenium	7782-49-2	1,040	1,000	RDL	Yes <sup>a</sup>
100-B-22.2_Shallow_Focused	non-Rad	Boron	7440-42-8	9,230	3,890	Background Value	Yes <sup>a</sup>
100-B-22.2_Shallow_Focused	non-Rad	Copper	7440-50-8	66,700	60,884	Scaled GWP SSL	Yes <sup>a</sup>
100-B-22.2_Shallow_Focused	non-Rad	Iron	7439-89-6	4.43E+07	3.26E+07	Background Value	Yes <sup>a</sup>
100-B-22.2_Shallow_Focused	non-Rad	Silver	7440-22-4	1,960	218	Scaled GWP SSL	Yes <sup>a</sup>
100-B-23_Shallow_Focused	non-Rad	Boron	7440-42-8	14,100	3,890	Background Value	Yes <sup>a</sup>
100-B-23_Shallow_Focused	non-Rad	Cadmium	7440-43-9	1,700	1,510	Background Value	Yes <sup>a</sup>
100-B-23_Shallow_Focused	non-Rad	Carbazole	86-74-8	370	330	RDL	Yes <sup>a</sup>
100-B-23_Shallow_Focused	non-Rad	Fluorene	86-73-7	390	330	RDL	Yes <sup>a</sup>
100-B-23_Shallow_Focused	non-Rad	Zinc	7440-66-6	1.31E+06	314,267	Scaled GWP SSL	Yes <sup>a</sup>
100-B-27_Deep	non-Rad	Iron	7439-89-6	3.61E+07	3.26E+07	Background Value	Yes <sup>a</sup>
100-B-28_Shallow_Focused	non-Rad	Iron	7439-89-6	3.69E+07	3.26E+07	Background Value	Yes <sup>a</sup>
100-C-3_Shallow	non-Rad	Methylene chloride	75-09-2	16	5.0	RDL	Yes <sup>a</sup>
100-C-9.3_Deep_Focused	non-Rad	Carbazole	86-74-8	7,300	330	RDL	Yes <sup>a</sup>
100-C-9.3_Deep_Focused	non-Rad	Dibenzofuran	132-64-9	3,000	1,677	Scaled GWP SSL	Yes <sup>a</sup>
116-B-4_Deep	non-Rad	Methylene chloride	75-09-2	8.0	5.0	RDL	Yes <sup>a</sup>
116-B-4_Deep	non-Rad	Silver	7440-22-4	720	708	Scaled GWP SSL	Yes <sup>a</sup>
116-B-5_Shallow_Focused	Rad	Tritium	10028-17-8	680	10	RDL	Yes <sup>a</sup>
116-C-1_Deep	Rad	Total beta radioactivity	SR-RAD	64	37	Scaled GWP SSL	Yes <sup>a</sup>
116-C-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	2,900	1,510	Background Value	Yes <sup>a</sup>
116-C-1_Deep_Focused	non-Rad	Silver	7440-22-4	890	479	Scaled GWP SSL	Yes <sup>a</sup>
116-C-1_Deep_Focused	Rad	Total beta radioactivity	SR-RAD	88	37	Scaled GWP SSL	Yes <sup>a</sup>
118-B-1_Shallow_1	non-Rad	Methylene chloride	75-09-2	15	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_1	Rad	Tritium	10028-17-8	239	10	RDL	Yes <sup>a</sup>
118-B-1_Shallow_2	Rad	Tritium	10028-17-8	60	10	RDL	Yes <sup>a</sup>
118-B-1_Shallow_3	non-Rad	Carbon tetrachloride	56-23-5	11	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_3	non-Rad	Methylene chloride	75-09-2	26	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_3	Rad	Tritium	10028-17-8	19	10	RDL	Yes <sup>a</sup>
118-B-1_Shallow_4	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	7.8	1.7	RDL	Yes <sup>a</sup>
118-B-1_Shallow_4	non-Rad	Carbon tetrachloride	56-23-5	17	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_4	non-Rad	Methylene chloride	75-09-2	12	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_5	non-Rad	Methylene chloride	75-09-2	13	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_6	non-Rad	Carbon tetrachloride	56-23-5	7.0	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_6	non-Rad	Methylene chloride	75-09-2	10	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_7	non-Rad	Boron	7440-42-8	18,100	6,336	Scaled GWP SSL	Yes <sup>a</sup>
118-B-1_Shallow_7	non-Rad	Carbon tetrachloride	56-23-5	10	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_7	non-Rad	Methylene chloride	75-09-2	10	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_Focused	non-Rad	Acetone	67-64-1	99	69	Scaled GWP SSL	Yes <sup>a</sup>
118-B-1_Shallow_Focused	non-Rad	Boron	7440-42-8	24,500	3,890	Background Value	Yes <sup>a</sup>
118-B-1_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	16	5.0	RDL	Yes <sup>a</sup>
118-B-1_Shallow_Focused	Rad	Tritium	10028-17-8	137	10	RDL	Yes <sup>a</sup>
118-B-6_Deep	Rad	Tritium	10028-17-8	2,780	10	RDL	Yes <sup>a</sup>
118-B-6_Shallow	Rad	Tritium	10028-17-8	241	10	RDL	Yes <sup>a</sup>
118-C-1_Shallow_2	non-Rad	Methylene chloride	75-09-2	14	5.0	RDL	Yes <sup>a</sup>
118-C-1_Shallow_3	non-Rad	Methylene chloride	75-09-2	12	5.0	RDL	Yes <sup>a</sup>
118-C-1_Shallow_4	non-Rad	Methylene chloride	75-09-2	13	5.0	RDL	Yes <sup>a</sup>
118-C-1_Shallow_Focused	non-Rad	Carbon tetrachloride	56-23-5	39	5.0	RDL	Yes <sup>a</sup>
118-C-1_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	19	5.0	RDL	Yes <sup>a</sup>
118-C-3.2_Deep_Focused	Rad	Technetium-99	14133-76-7	1.2	0.51	Scaled GWP SSL	Yes <sup>b</sup>
118-C-4_Shallow	non-Rad	Methylene chloride	75-09-2	12	5.0	RDL	Yes <sup>a</sup>
126-B-3_Shallow	non-Rad	Boron	7440-42-8	4,975	3,987	Scaled GWP SSL	Yes <sup>a</sup>
128-B-3_Shallow_1	non-Rad	Methylene chloride	75-09-2	8.2	5.0	RDL	Yes <sup>a</sup>
128-B-3_Shallow_2	non-Rad	Methylene chloride	75-09-2	12	5.0	RDL	Yes <sup>a</sup>
128-B-3_Shallow_3	non-Rad	Methylene chloride	75-09-2	16	5.0	RDL	Yes <sup>a</sup>
128-C-1_Shallow	non-Rad	Boron	7440-42-8	9,818	7,676	Scaled GWP SSL	Yes <sup>a</sup>
128-C-1_Shallow	non-Rad	Selenium	7782-49-2	1,300	1,000	RDL	Yes <sup>a</sup>
128-C-1_Shallow	non-Rad	Silver	7440-22-4	6,600	606	Scaled GWP SSL	Yes <sup>a</sup>
128-C-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	1,797	1,510	Background Value	Yes <sup>a</sup>
1607-B1_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	0.52	26	Scaled GWP SSL	Yes <sup>im</sup>
1607-B2.1_Shallow	non-Rad	2,4,5-Tris(2,4,5-Trichlorophenoxy)acetic acid	93-76-5	47	20	RDL	Yes <sup>im</sup>
1607-B2.1_Shallow	non-Rad	2,4,5-Tris(2,4,5-Trichlorophenoxy)propionic acid/Silvex	93-72-1	23	100	RDL	Yes <sup>im</sup>
1607-B2.1_Shallow	non-Rad	2,4-DB(4,2,4-Dichlorophenoxy)butanoic acid	94-62-6	250	9,762	Scaled GWP SSL	Yes <sup>im</sup>
1607-B2.1_Shallow	non-Rad	Boron	7440-42-8	19,810	1.7	RDL	Yes <sup>a</sup>
1607-B2.2_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	1.9	3,890	Background Value	Yes <sup>a</sup>
1607-B2.2_Shallow	non-Rad	Boron	7440-42-8	4,666	32,027	Scaled GWP SSL	Yes <sup>a</sup>
1607-B7_Shallow	non-Rad	beta-1,2,3,4,5,6-Hexachlorocyclohexane (beta-BHC)	319-85-7	2.1	1.7	RDL	Yes <sup>a</sup>

a. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for beta-BHC (6.8 µg/kg) is based on the 95% K<sub>M</sub> (% Bootstrap) UCL from a set of 13 samples (2 detects and 11 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.

b. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for heptachlor (5.5 µg/kg) is based on the maximum detection from a set of 11 samples (1 detect and 10 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.

c. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for pentachlorophenol (1,900 µg/kg) is based on the maximum detection from a set of 10 samples (1 detect and 9 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.

d. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (34,200 µg/kg) is based on the maximum detection from a set of 11 samples (1 detect). With the exception of the maximum detection, boron results were within the range of naturally occurring levels (3,890 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.

e. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for cadmium (13,200 µg/kg) is based on the maximum detection from a set of 11 samples (3 detects and 8 nondetects). With the exception of the maximum detection, cadmium results were within the range of naturally occurring levels (563 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.

f. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for naphthalene (440 µg/kg) is based on the maximum detection from a single sample. A field duplicate was collected from this location and reported a concentration of 140 µg/kg which is less than the SSL. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.

g. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for selenium (1,280 µg/kg) is based on the maximum detection from a set of 12 samples (1 detect and 11 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.

h. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for silver (1,040 µg/kg) is based on the 95% K<sub>M</sub> (% Bootstrap) UCL from a set of 12 samples (2 detects and 10 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.

i. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for technetium (1,200 µg/kg) is based on the maximum concentration from a set of 14 samples (1 detect and 13 nondetects); the single detection was greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.



## ECF-100BC5-11-0082, REV. 1

Table 7-6. Evaluation of 100-BC OU Waste Site Decision Units with EPCs Greater than Groundwater Protection Soil Screening Levels

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Exposure Point Concentration (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Ratio	Is EPC's Soil Screening Level Protective of Groundwater?
j. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (9,230 µg/kg) is based on the maximum detection from a set of 10 samples (6 detections and 4 nondetections). With the exception of the maximum detection, boron results were within the range of naturally occurring levels (3,890 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
k. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for copper (56,700 µg/kg) is based on the maximum detection from a set of 10 samples (10 detections). With the exception of the maximum detection, copper results were within the range of naturally occurring levels (22,000 µg/kg and 51,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
l. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for iron (44,300,000 µg/kg) is based on the maximum detection from a set of 10 samples (10 detections). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 6,810,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
m. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for silver (1,690 µg/kg) is based on the maximum detection from a set of 10 samples (3 detections and 7 nondetections); all 3 detections were greater than the SSL. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
n. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (14,100 µg/kg) is based on the maximum detection from a set of 4 samples (3 detections and 1 nondetection). With the exception of the maximum detection, boron results were within the range of naturally occurring levels (3,890 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
o. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for cadmium (1,700 µg/kg) is based on the maximum detection from a set of 4 samples (3 detections and 1 nondetection). All cadmium results were within the range of naturally occurring levels (363 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
p. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbazole (370 µg/kg) is based on the maximum detection from a set of 3 samples (1 detection and 2 nondetections). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
q. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for benzene (390 µg/kg) is based on the maximum detection from a set of 3 samples (1 detection and 2 nondetections). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
r. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for zinc (3,310,000 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). With the exception of the maximum detection, zinc results were within the range of naturally occurring levels (67,800 µg/kg and 366,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
s. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for iron (36,100,000 µg/kg) is based on the 95% Student's t UCL from a set of 25 samples (25 detections). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 68,100,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
t. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for iron (36,900,000 µg/kg) is based on the maximum detection from a set of 6 samples (6 detections). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 68,100,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
u. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (16 µg/kg) is based on the maximum detection from a set of 4 samples (3 detections and 1 nondetection). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
v. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbazole (7,300 µg/kg) is based on the maximum detection from a set of 2 samples (2 detections). Both carbazole results were flagged "F" indicating they are estimated concentrations. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
w. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for dibenzofuran (3,000 µg/kg) is based on the maximum detection from a set of 2 samples (1 detection and 1 nondetection). The single detection was qualified with a "F" flag indicating it is an estimated concentration. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
x. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (8 µg/kg) is based on the maximum detection from a set of 3 samples (1 detection). The single detection of methylene chloride was flagged "B" indicating it was detected in both the associated method blank and in the sample.							
y. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for silver (720 µg/kg) is based on the 95% KM (% Bootstrap) UCL from a set of 6 samples (2 detections and 4 nondetections); both detections were greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
z. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (580 pCi/g) is based on the maximum detection from a set of 6 samples (3 detections and 3 nondetections). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
aa. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for cadmium (2,900 µg/kg) is based on the maximum detection from a set of 7 samples (5 detections and 2 nondetections). With the exception of the maximum detection, all cadmium results were within the range of naturally occurring levels (363 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and is unlikely to impact groundwater.							
ab. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for silver (890 µg/kg) is based on the maximum detection from a set of 7 samples (1 detection and 6 nondetections); the single detection was greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
ac. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (15 µg/kg) is based on the maximum detection from a set of 2 samples (2 detections). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
ad. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (239 pCi/g) is based on the maximum detection from a set of 2 samples (1 detection and 1 nondetection). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
ae. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (60 pCi/g) is based on the maximum detection from a set of 4 samples (1 detection and 3 nondetections). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
af. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbon tetrachloride (11 µg/kg) is based on the maximum detection from a set of 4 samples (2 detections and 2 nondetections). Concentrations of carbon tetrachloride range between 8 µg/kg and 11 µg/kg. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
ag. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (26 µg/kg) is based on the maximum detection from a set of 4 samples (3 detections and 1 nondetection). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
ah. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (19 pCi/g) is based on the maximum detection from a set of 4 samples (1 detection and 3 nondetections). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
ai. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for beta-BHC (7.8 µg/kg) is based on the maximum detection from a set of 4 samples (1 detection and 3 nondetections). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.							
aj. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbon tetrachloride (17 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). Concentrations of carbon tetrachloride range between 5 µg/kg and 17 µg/kg and represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
ak. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (12 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
al. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (13 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). All 4 detections of methylene chloride were flagged "B" indicating it was detected in both the associated method blank and in the sample. The EPC overstates the concentration of methylene chloride in this decision unit.							
am. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbon tetrachloride (7 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). Concentrations of carbon tetrachloride range between 2 µg/kg and 7 µg/kg and represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
an. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (10 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
ao. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (18,100 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). With the exception of the two detections (the maximum and 7,000 µg/kg), boron results were within the range of naturally occurring concentrations (3,890 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact groundwater.							
ap. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbon tetrachloride (10 µg/kg) is based on the maximum detection from a set of 4 samples (3 detections and 1 nondetection). Concentrations of carbon tetrachloride range between 9 µg/kg and 10 µg/kg and represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							
aq. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (10 µg/kg) is based on the maximum detection from a set of 4 samples (2 detections and 2 nondetections). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
ar. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for acetone (99 µg/kg) is based on the maximum detection from a set of 2 samples (2 detections). The lower of the two detected concentrations was qualified with a "B" flag indicating its presence is the result of laboratory contamination. The EPC likely overstates the concentration of acetone at this decision unit and unlikely to impact groundwater.							
as. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (24,500 µg/kg) is based on the maximum detection from a set of 12 samples (12 detections). Three boron detections, ranging from 13,100 µg/kg to 24,500 µg/kg, were above naturally occurring concentrations while the remaining 9 boron results were within the range of naturally occurring concentrations (3,890 µg/kg and 5,860 µg/kg) at the Hanford Site.							
at. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (16 µg/kg) is based on the maximum detection from a set of 2 samples (2 detections). Both methylene chloride were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
au. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (137 pCi/g) is based on the maximum detection from a set of 6 samples (4 detections). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
av. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (2,780 pCi/g) is based on the maximum detection from a set of 4 samples (4 detections). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
aw. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for tritium (241 pCi/g) is based on the maximum detection from a set of 4 samples (2 detections and 2 nondetections). Site-specific vadose zone modeling was performed using the soil column that was most representative of the remanufactured waste site instead of the worst case column; tritium concentrations did not impact groundwater using soil concentrations representative of the waste site (see ECF-HANFORD-15-0129).							
ax. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (14 µg/kg) is based on the maximum detection from a set of 3 samples (3 detections). All methylene chloride results were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
ay. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (12 µg/kg) is based on the maximum detection from a set of 4 samples (4 detections). All methylene chloride results were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
az. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (13 µg/kg) is based on the 95% Student's t UCL from a set of 5 samples (5 detections). All methylene chloride results were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.							
ba. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for carbon tetrachloride (39 µg/kg) is based on the maximum detection from a set of 2 samples (2 detections). Concentrations of carbon tetrachloride range between 10 µg/kg and 39 µg/kg and represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.							



Table 7-6. Evaluation of 100-BC OU Waste Site Decision Units with EPCs Greater than Groundwater Protection Soil Screening Levels

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Exposure Point Concentration (µg/kg or pCi/g)	Selected GWP SSL (µg/kg or pCi/g)	Selected GWP SSL Results	Is EPC > Soil Screening Level Protective of Groundwater?
<p>ba. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (19 µg/kg) is based on the maximum detection from a set of 3 samples (2 detects and 1 nondetect). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.</p>							
<p>bc. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for trichloroethene-99 (1.2 pCi/g) is based on the maximum detection from a set of 12 samples (2 detects and 10 nondetects). Detected concentrations are 0.71 pCi/g and 1.2 pCi/g and represent a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.</p>							
<p>bd. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (12 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.</p>							
<p>be. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (4,975 µg/kg) is based on the 95% KM (t) UCL from a set of 15 samples (14 detects and 1 nondetect). With the exception of two detected results (6,300 µg/kg and 7,800 µg/kg), boron results were within the range of naturally occurring levels (3,090 µg/kg and 5,860 µg/kg) at the Hanford Site. As a result, the EPC likely overstates the concentration at this decision unit and is unlikely to impact groundwater.</p>							
<p>bf. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (8.2 µg/kg) is based on the 95% Student's-t UCL from a set of 10 samples (10 detects). All methylene chloride results were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.</p>							
<p>bg. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (12 µg/kg) is based on the 95% Student's-t UCL from a set of 10 samples (10 detects). All methylene chloride results were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.</p>							
<p>bh. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for methylene chloride (16 µg/kg) is based on the 95% KM (Pearson's Resampling) UCL from a set of 17 samples (9 detects and 8 nondetects). All methylene chloride detections were flagged "B" indicating it was detected in both the associated method blank and in the sample. Methylene chloride is a common laboratory contaminant indicating that the contaminant is introduced in the laboratory after the sample is collected in the field.</p>							
<p>bi. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (9,818 µg/kg) is based on the 95% Chebychev (Mean,SD) UCL from a set of 14 samples (14 detects). With the exception of the maximum detection, all boron results were within the range of naturally occurring levels (3,090 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and is unlikely to impact groundwater.</p>							
<p>bj. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for selenium (1,200 µg/kg) is based on the maximum concentration from a set of 14 samples (1 detect and 13 nondetects); the single detection was greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact groundwater.</p>							
<p>bk. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for silver (6,600 µg/kg) is based on the maximum detection from a set of 14 samples (2 detects and 12 nondetects). The single detection and all nondetects were flagged "C" by the laboratory indicating this analyte was detected in both the sample and the associated QC blank. As a result, the EPC overstates the concentration at this decision unit and silver is unlikely to impact groundwater.</p>							
<p>bl. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for cadmium (1,797 µg/kg) is based on the maximum detection from a set of 10 samples (8 detects and 2 nondetects). All cadmium results (detected concentrations and detection limits) were within the range of naturally occurring levels (563 µg/kg and 2,990 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact groundwater.</p>							
<p>bm. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for alpha-BHC (0.92 µg/kg) is based on the maximum detection from a set of 3 samples (1 detect and 2 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.</p>							
<p>bn. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for 2,4,5-T (47 µg/kg) is based on the 95% KM (Chebyshev) UCL from a set of 11 samples (9 detects and 2 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.</p>							
<p>bo. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for 2,4,5-TP (25 µg/kg) is based on the maximum detection from a set of 11 samples (1 detect and 10 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.</p>							
<p>bp. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for 2,4-D (250 µg/kg) is based on the maximum detection from a set of 11 samples (1 detect and 10 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.</p>							
<p>bq. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (19,810 µg/kg) is based on the 97.5% KM (Chebyshev) UCL from a set of 11 samples (8 detects and 3 nondetects). With the exception of two samples (14,200 µg/kg and 25,400 µg/kg), boron results were within the range of naturally occurring levels (3,090 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and is unlikely to impact groundwater.</p>							
<p>br. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for beta-BHC (1.9 µg/kg) is based on the maximum detection from a set of 14 samples (1 detect and 13 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.</p>							
<p>bs. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for boron (4,666 µg/kg) is based on the 95% Approximate Gamma UCL from a set of 14 samples (14 detects). With the exception of the maximum detection (13,200 µg/kg), boron results were within the range of naturally occurring levels (3,090 µg/kg and 5,860 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and is unlikely to impact groundwater.</p>							
<p>bt. Extended GWP SSL, but eliminated through further evaluation. The calculated EPC for beta-BHC (2.1 µg/kg) is based on the maximum detection from a set of 4 samples (1 detect and 3 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principles. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact groundwater.</p>							



Table 7-7. Evaluation of 100-BC OU Waste Site Data with EPCs Greater than Surface Water Protection Soil Screening Levels

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Exposure Point Concentration (µg/kg or pCi/g)	Selected SWP SSL (µg/kg or pCi/g)	Selected SWP SSL Basis	Is EPC > Soil Screening Level Protective of Surface Water?
100-B-1_Shallow_2	non-Rad	Heptachlor	76-44-8	5.5	2,000	RDL	Yes <sup>a</sup>
100-B-14:2_Shallow_2	non-Rad	Copper	7440-50-8	23,864	22,000	Background Value	Yes <sup>b</sup>
100-B-14:2_Shallow_2	non-Rad	Pentachlorophenol	87-86-5	1,900	330	RDL	Yes <sup>c</sup>
100-B-16_Shallow_Focused	non-Rad	Silver	7440-22-4	1,500	200	RDL	Yes <sup>d</sup>
100-B-18_Shallow_Focused	non-Rad	Cadmium	7440-43-9	13,200	1510.0	Background Value	Yes <sup>e</sup>
100-B-19_Shallow_2	non-Rad	Selenium	7782-49-2	1,280	780	Background Value	Yes <sup>f</sup>
100-B-19_Shallow_5	non-Rad	Mercury	7439-97-6	6,100	3,198	Scaled SWP SSL	Yes <sup>g</sup>
100-B-19_Shallow_Focused	non-Rad	Copper	7440-50-8	22,800	22,000	Background Value	Yes <sup>h</sup>
100-B-19_Shallow_Focused	non-Rad	Iron	7439-89-6	3.96E+07	32,600,000	Background Value	Yes <sup>i</sup>
100-B-19_Shallow_Focused	non-Rad	Mercury	7439-97-6	17,100	368	Scaled SWP SSL	Yes <sup>j</sup>
100-B-20_Shallow_Focused	non-Rad	Copper	7440-50-8	43,300	29,287	Scaled SWP SSL	Yes <sup>k</sup>
100-B-21:2_Shallow	non-Rad	Silver	7440-22-4	390	200	RDL	Yes <sup>l</sup>
100-B-21:4_Shallow	non-Rad	Selenium	7782-49-2	1,040	1000	RDL	Yes <sup>m</sup>
100-B-22:2_Shallow_Focused	non-Rad	Copper	7440-50-8	66,700	22,000	Background Value	Yes <sup>n</sup>
100-B-22:2_Shallow_Focused	non-Rad	Iron	7439-89-6	4.43E+07	32,600,000	Background Value	Yes <sup>o</sup>
100-B-22:2_Shallow_Focused	non-Rad	Silver	7440-22-4	1,960	200.0	RDL	Yes <sup>p</sup>
100-B-23_Shallow_Focused	non-Rad	Cadmium	7440-43-9	1,700	1510.000	Background Value	Yes <sup>q</sup>
100-B-23_Shallow_Focused	non-Rad	Mercury	7439-97-6	8,200	200	RDL	Yes <sup>r</sup>
100-B-23_Shallow_Focused	non-Rad	Zinc	7440-66-6	1.31E+06	314,267	Scaled SWP SSL	Yes <sup>t</sup>
100-B-27_Deep	non-Rad	Copper	7440-50-8	28,589	22,000	Background Value	Yes <sup>u</sup>
100-B-27_Deep	non-Rad	Iron	7439-89-6	3.61E+07	32,600,000	Background Value	Yes <sup>v</sup>
100-B-27_Deep	non-Rad	Silver	7440-22-4	208	200	RDL	Yes <sup>w</sup>
100-B-28_Shallow_Focused	non-Rad	Copper	7440-50-8	31,000	22,000	Background Value	Yes <sup>x</sup>
100-B-28_Shallow_Focused	non-Rad	Iron	7439-89-6	3.69E+07	32,600,000	Background Value	Yes <sup>y</sup>
100-B-28_Shallow_Focused	non-Rad	Mercury	7439-97-6	804	535	Scaled SWP SSL	Yes <sup>z</sup>
100-B-31_Shallow	non-Rad	Copper	7440-50-8	30,009	22,000	Background Value	Yes <sup>aa</sup>
100-B-35:1_Deep_Focused	non-Rad	Copper	7440-50-8	23,200	22,000	Background Value	Yes <sup>ab</sup>
100-B-35:2_Shallow_Focused	non-Rad	Silver	7440-22-4	569	200	RDL	Yes <sup>ac</sup>
100-B-5_Deep	non-Rad	Mercury	7439-97-6	5,040	2,920	Scaled SWP SSL	Yes <sup>ad</sup>
100-C-9:2_Shallow_Focused	non-Rad	Copper	7440-50-8	66,100	22,000	Background Value	Yes <sup>ae</sup>
100-C-9:2_Shallow_Focused	non-Rad	Endrin	72-20-8	3.6	3,000	RDL	Yes <sup>af</sup>
116-B-11_Deep	non-Rad	Mercury	7439-97-6	5,251	940	Scaled SWP SSL	Yes <sup>ag</sup>
116-B-4_Deep	non-Rad	Silver	7440-22-4	720	200	RDL	Yes <sup>ah</sup>
116-B-5_Shallow_Focused	non-Rad	Mercury	7439-97-6	16,000	2,143	Scaled SWP SSL	Yes <sup>ai</sup>
116-C-1_Deep	non-Rad	Mercury	7439-97-6	2,275	1,401	Scaled SWP SSL	Yes <sup>aj</sup>
116-C-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	2,900	1510.00	Background Value	Yes <sup>ak</sup>
116-C-1_Deep_Focused	non-Rad	Copper	7440-50-8	30,400	22,000	Background Value	Yes <sup>al</sup>
116-C-1_Deep_Focused	non-Rad	Mercury	7439-97-6	11,800	1,401	Scaled SWP SSL	Yes <sup>am</sup>
116-C-1_Deep_Focused	non-Rad	Silver	7440-22-4	890	200	RDL	Yes <sup>an</sup>
116-C-3_Shallow_Focused	non-Rad	Silver	7440-22-4	270	200	RDL	Yes <sup>ao</sup>
116-C-5_Deep	non-Rad	Mercury	7439-97-6	2,436	866	Scaled SWP SSL	Yes <sup>ap</sup>
118-B-1_Shallow_4	non-Rad	Dieldrin	60-57-1	3.8	3.4	Scaled SWP SSL	Yes <sup>aq</sup>
118-B-1_Shallow_7	non-Rad	Copper	7440-50-8	25,700	22,000	Background Value	Yes <sup>ar</sup>
118-B-1_Shallow_Focused	non-Rad	Copper	7440-50-8	28,000	22,000	Background Value	Yes <sup>as</sup>
118-B-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	14,500	321	Scaled SWP SSL	Yes <sup>at</sup>
118-C-1_Shallow_3	non-Rad	Copper	7440-50-8	45,200	22,000	Background Value	Yes <sup>au</sup>
118-C-1_Shallow_Focused	non-Rad	Copper	7440-50-8	23,300	22,000	Background Value	Yes <sup>av</sup>
118-C-3:3_Shallow_Focused	non-Rad	Copper	7440-50-8	38,300	22,000	Background Value	Yes <sup>aw</sup>
120-B-1_Shallow_Focused	non-Rad	Silver	7440-22-4	230	200	RDL	Yes <sup>ax</sup>
126-B-3_Shallow	non-Rad	Copper	7440-50-8	23,531	22,000	Background Value	Yes <sup>ay</sup>
128-B-3_Shallow_2	non-Rad	Copper	7440-50-8	38,045	22,000	Background Value	Yes <sup>az</sup>
128-B-3_Shallow_2	non-Rad	Silver	7440-22-4	241	200	RDL	Yes <sup>ba</sup>
128-B-3_Shallow_3	non-Rad	Silver	7440-22-4	300	200	RDL	Yes <sup>bb</sup>
128-C-1_Shallow	non-Rad	Copper	7440-50-8	48,008	22,000	Background Value	Yes <sup>bc</sup>
128-C-1_Shallow	non-Rad	Selenium	7782-49-2	1,300	1000	RDL	Yes <sup>bd</sup>
128-C-1_Shallow	non-Rad	Silver	7440-22-4	6,600	200	RDL	Yes <sup>be</sup>
128-C-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	1,797	1510.0	Background Value	Yes <sup>bf</sup>
1607-B2:1_Shallow	non-Rad	Copper	7440-50-8	30,171	22,000	Background Value	Yes <sup>bg</sup>
1607-B2:2_Shallow	non-Rad	Copper	7440-50-8	51,480	22,000	Background Value	Yes <sup>bh</sup>
1607-B2:2_Shallow	non-Rad	Endosulfan I	959-98-8	6.9	3,000	RDL	Yes <sup>bi</sup>
1607-B2:2_Shallow	non-Rad	Endosulfan II	33213-65-9	3.4	3,000	RDL	Yes <sup>bj</sup>
1607-B9_Shallow	non-Rad	Dieldrin	60-57-1	4.4	3.3	RDL	Yes <sup>bk</sup>
600-233_Shallow_Focused	non-Rad	Selenium	7782-49-2	3,000	1000	RDL	Yes <sup>bl</sup>

- a. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for heptachlor (5.5 µg/kg) is based on the maximum detection from a set of 13 samples (1 detect and 12 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principals. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact surface water.
- b. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (23,864 µg/kg) is based on the 95% Student's-t UCL from a set of 10 samples (10 detects). All copper results are within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.
- c. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for pentachlorophenol (1,900 µg/kg) is based on the maximum detection from a set of 10 samples (1 detect and 9 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.
- d. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (1,500 µg/kg) is based on the maximum detection from a set of 4 samples (1 detect and 3 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.
- e. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (13,200 µg/kg) is based on the maximum detection from a set of 11 samples (8 detects and 3 nondetects). With the exception of the maximum detection, cadmium results were within the range of naturally occurring levels (563 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.
- f. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for selenium (1,280 µg/kg) is based on the maximum detection from a set of 12 samples (1 detect and 11 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.



Table 7-7. Evaluation of 100-BC OU Waste Site Data with EPCs Greater than Surface Water Protection Soil Screening Levels

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Exposure Point Concentration (µg/kg or pCi/g)	Selected SWP SSL (µg/kg or pCi/g)	Selected SWP SSL Basis	Is EPC > Soil Screening Level Protective of Surface Water?
g. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (6,100 µg/kg) is based on the maximum detection from a set of 10 samples (9 detects and 1 nondetect). With the exception of the maximum detection, mercury results ranged between 10 µg/kg and 980 µg/kg where 4 of 10 results within the range of naturally occurring levels (13 µg/kg and 29 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
h. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (22,800 µg/kg) is based on the maximum detection from a set of 7 samples (7 detects). Copper concentrations ranged between 11,000 µg/kg and 22,600 µg/kg which are within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
i. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for iron (39,600,000 µg/kg) is based on the maximum detection from a set of 7 samples (7 detects). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 68,100,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
j. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (17,100 µg/kg) is based on the maximum detection from a set of 7 samples (5 detects and 2 nondetects). Mercury detections ranged between 250 µg/kg and 17,100 µg/kg. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
k. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (43,300 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
l. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (390 µg/kg) is based on the maximum detection from a set of 11 samples (1 detect and 10 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
m. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for selenium (1,040 µg/kg) is based on the 95% KM (% Bootstrap) UCL from a set of 12 samples (2 detects and 10 nondetects). The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
n. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (1,020 µg/kg) is based on the maximum detection from a set of 10 samples (8 detects and 2 nondetects). All cadmium results were within the range of naturally occurring levels (563 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
o. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (66,700 µg/kg) is based on the maximum detection from a set of 10 samples (10 detects). With the exception of the maximum detection, copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
p. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for iron (44,300,000 µg/kg) is based on the maximum detection from a set of 10 samples (10 detects). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 68,100,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
q. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (1,960 µg/kg) is based on the maximum detection from a set of 10 samples (3 detects and 7 nondetects); all 3 detections were greater than the SSL. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
r. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (1,700 µg/kg) is based on the maximum detection from a set of 4 samples (3 detects and 1 nondetect). All cadmium results were within the range of naturally occurring levels (563 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
s. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (8,200 µg/kg) is based on the maximum detection from a set of 4 samples (3 detects and 1 nondetect). Mercury detections ranged between 40 µg/kg and 8,200 µg/kg. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
t. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for zinc (1,310,000 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). With the exception of the maximum detection, zinc results were within the range of naturally occurring levels (67,800 µg/kg and 366,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
u. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (28,589 µg/kg) is based on the 95% Student's-t UCL from a set of 25 samples (25 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
v. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for iron (36,100,000 µg/kg) is based on the 95% Student's-t UCL from a set of 25 samples (25 detects). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 68,100,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
w. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (208 µg/kg) is based on the 95% KM (Percentile Bootstrap) UCL from a set of 25 samples (5 detects and 20 nondetects). Silver results are within the range of naturally occurring levels (167 µg/kg and 273 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
x. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (31,000 µg/kg) is based on the maximum detection from a set of 6 samples (6 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
y. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for iron (36,900,000 µg/kg) is based on the maximum detection from a set of 6 samples (6 detects). All iron results are within the range of naturally occurring levels (32,600,000 µg/kg and 68,100,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
z. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (804 µg/kg) is based on the maximum detection from a set of 6 samples (2 detects and 4 nondetects). With the exception of the maximum detection, mercury results were within the range of naturally occurring levels (13 µg/kg and 29 µg/kg) at the Hanford Site. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
aa. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (30,009 µg/kg) is based on the 95% Modified-t UCL from a set of 21 samples (21 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
ab. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (23,200 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
ac. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (569 µg/kg) is based on the maximum detection from a set of 2 samples (2 detects); both detections were greater than the SSL and both results were flagged with "J" validation qualifier indicating they are estimated results. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ad. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (5,040 µg/kg) is based on the maximum detection from a set of 3 samples (3 detects). Mercury results ranged between 491 µg/kg and 5,040 µg/kg; one of three detects were greater than the SSL. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ae. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (66,100 µg/kg) is based on the maximum detection from a set of 13 samples (13 detects). With the exception of the maximum detection, all copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
af. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for endrin (3.6 µg/kg) is based on the maximum detection from a set of 13 samples (1 detect and 12 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principals. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact surface water.							
ag. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (5,251 µg/kg) is based on the 95% Approximate Gamma UCL from a set of 12 samples (12 detects). Mercury results ranged between 170 µg/kg and 14,500 µg/kg, all greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ah. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (720 µg/kg) is based on the 95% KM (% Bootstrap) UCL from a set of 6 samples (2 detects and 4 nondetects); both detections were greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ai. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (16,000 µg/kg) is based on the maximum detection from a set of 43 samples (8 detects and 35 nondetects). Mercury results ranged between 200 µg/kg and 16,000 µg/kg, all detections were greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
aj. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (2,275 µg/kg) is based on the 95% Approximate Gamma UCL from a set of 12 samples (12 detects). Mercury results ranged between 30 µg/kg and 3,100 µg/kg, all greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ak. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (2,900 µg/kg) is based on the maximum detection from a set of 7 samples (5 detects and 2 nondetects). With the exception of the maximum detection, all cadmium results were within the range of naturally occurring levels (563 µg/kg and 2,980 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
al. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (30,400 µg/kg) is based on the maximum detection from a set of 7 samples (7 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
am. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (11,800 µg/kg) is based on the maximum detection from a set of 7 samples (7 detects). Mercury results ranged between 30 µg/kg and 11,800 µg/kg, all results greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							



Table 7-7. Evaluation of 100-BC OU Waste Site Data with EPCs Greater than Surface Water Protection Soil Screening Levels

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Exposure Point Concentration (µg/kg or pCi/g)	Selected SWP SSL (µg/kg or pCi/g)	Selected SWP SSL Basis	Is EPC > Soil Screening Level Protective of Surface Water?
aa. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (890 µg/kg) is based on the maximum concentration from a set of 7 samples (1 detect and 6 nondetects); the single detection was greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ab. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (270 µg/kg) is based on the maximum concentration from a set of 4 samples (1 detect and 3 nondetects); the single detection was within the range of naturally occurring levels (167 µg/kg and 273 µg/kg) at the Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ac. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (2,436 µg/kg) is based on the 97.5% KM (Chebyshev) UCL from a set of 21 samples (20 detects and 1 nondetect). Mercury results ranged between 40 µg/kg and 6,200 µg/kg; all mercury results were greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ad. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for dieldrin (3.8 µg/kg) is based on the maximum detection from a set of 4 samples (1 detect and 3 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principals. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact surface water.							
ae. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (25,700 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). With the exception of the maximum detection, all copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
af. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (28,000 µg/kg) is based on the maximum detection from a set of 12 samples (12 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
ag. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for mercury (14,500 µg/kg) is based on the maximum detection from a set of 7 samples (6 detects and 1 nondetect). Mercury results ranged between 240 µg/kg and 14,500 µg/kg, all greater than naturally occurring concentrations. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
ah. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (45,200 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
ai. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (23,300 µg/kg) is based on the maximum detection from a set of 6 samples (6 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
aj. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (38,300 µg/kg) is based on the maximum detection from a set of 4 samples (4 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
ak. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (230 µg/kg) is based on the maximum detection from a set of 6 samples (1 detect and 5 nondetects); the single detection and all detection limits were with naturally occurring levels (167 µg/kg and 273 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact surface water.							
al. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (23,531 µg/kg) is based on the 95% Approximate Gamma UCL from a set of 15 samples (15 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact surface water.							
am. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (38,045 µg/kg) is based on the 95% H-UCL from a set of 10 samples (10 detects). With the exception of the maximum detection (78,900 µg/kg), all copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact surface water.							
ba. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (241 µg/kg) is based on the 95% KM (t) UCL from a set of 10 samples (2 detects and 8 nondetects); all silver results (detected concentrations and detection limits) were with naturally occurring levels (167 µg/kg and 273 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact surface water.							
bb. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (300 µg/kg) is based on the maximum detection from a set of 17 samples (1 detect and 16 nondetects); with the exception of the single detect, all silver results were not detected. As a result, the EPC would not likely result in a concentration that could impact surface water.							
bc. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (64,800,000 µg/kg) is based on the 95% Chebyshev (Mean,SD) UCL from a set of 14 samples (14 detects). With the exception of two samples, copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
bd. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for selenium (1,300 µg/kg) is based on the maximum concentration from a set of 14 samples (1 detect and 13 nondetects); the single detection was greater than Hanford Site background. The EPC represents a very low mass of potential contamination and there is not a significant potential that contamination could migrate through the vadose zone and result in a concentration that could impact surface water.							
be. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for silver (6,600 µg/kg) is based on the maximum detection from a set of 14 samples (2 detects and 12 nondetects). The single detection and all nondetects were flagged "C" by the laboratory indicating the analyte was detected in both the same and the associated QC blank. As a result, the EPC overstates the concentration at this decision unit and silver is unlikely to impact surface water.							
bf. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (1,797 µg/kg) is based on the maximum detection from a set of 10 samples (8 detects and nondetects). All cadmium results (detected concentrations and detection limits) were within the range of naturally occurring levels (563 µg/kg and 2,980 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact surface water.							
bg. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (30,171 µg/kg) is based on the 95% Approximate Gamma UCL from a set of 11 samples (11 detects). All copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. As a result, the EPC would not likely result in a concentration that could impact surface water.							
bh. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for copper (51,480 µg/kg) is based on the 95% Chebyshev (Mean, Sd) UCL from a set of 14 samples (14 detects). With the exception of the maximum detection (107,000 µg/kg), copper results were within the range of naturally occurring levels (22,000 µg/kg and 61,000 µg/kg) at the Hanford Site. The EPC likely overstates the concentration at this decision unit and unlikely to impact surface water.							
bi. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for endosulfan I (6.9 µg/kg) is based on the maximum detection from a set of 14 samples (1 detect and 13 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principals. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact surface water.							
bj. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for endosulfan II (3.4 µg/kg) is based on the maximum detection from a set of 14 samples (1 detect and 13 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principals. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact surface water.							
bk. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for dieldrin (4.4 µg/kg) is based on the 95% KM (t) UCL from a set of 8 samples (2 detects and 6 nondetects). Biological controls including pesticides and herbicides are applied on the Hanford Site to prevent the spread of contamination by biological vectors and comply with environmental, safety, health and quality principals. The presence of this pesticide is likely from application of biological controls and not the result of Hanford Site operations and is unlikely to impact surface water.							
bl. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for selenium (3,000 µg/kg) is based on the maximum detection from a set of 2 samples (1 detect and 1 nondetect). The single detection and the single nondetect were flagged "C" by the laboratory indicating the analyte was detected in both the sample and the associated QC blank. As a result, the EPC overstates the concentration at this decision unit and selenium is unlikely to impact surface water.							