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ECF-300NPL-11-0154
Revision 3

Comparison of the 300-FF-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

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Richland, Washington 99352

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Draft A	Incorporated revised SSLs for analytes other than total uranium & revised BG values for gap analytes. Eliminated screen.	10/14/2011	All	
Rev. 0	Incorporated revised SSLs calculated with STOMP 70:30/100:0 contaminant model; eliminated comparisons to 3-phase model	5/10/2012	All	☒
Rev. 1	Incorporated comparisons to new uranium 2-D SSL values for GWP and SWP	10/22/2012	All	☒
Rev. 2	Incorporated revised GWP and SWP SSLs for analytes with updated toxicity values from EPA in Dec 2012	03/21/2013	All Tables	☒
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ENVIRONMENTAL CALCULATION COVER PAGE (CONTINUED)

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Terms

CERCLA	*Comprehensive Environmental Response, Compensation, and Liability Act of 1980*
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

1 Purpose

This environmental calculation file (ECF) documents the methodology used to determine if current site conditions for the 300 Area based on post-remediation soil sample results exceed soil screening levels for the protection of groundwater and the protection of surface water. The 300 Area is associated with two source operable units (OUs): the 300-FF-1 OU and 300-FF-2 OU. These OUs are referred to collectively herein as the 300 Area Source OU. The exposure point concentrations (EPCs) for each waste site decision unit in the 300 Area Source OU are compared to soil screening levels to identify contaminants of potential concern (COPCs) for the protection of groundwater pathway and the protection of surface water pathway. This procedure is consistent with the guidance described in EPA 540/R-96/018, *Soil Screening Guidance: Users 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-2010-99, *Remedial Investigation/Feasibility Study for the 300-FF-1, 300-FF-2, and 300-FF-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, 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. 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 soil screening levels 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 both the 90th percentile background concentration and a soil screening level are considered COPCs and are carried forward to the RI/FS report.

Due to the geochemical complexity of uranium in 300 Area Source OU soils, the uranium soil screening levels for the protection of groundwater and the protection of surface water were calculated from peak groundwater concentration of uranium simulated using the STOMP 2D Uranium Source Model. The STOMP 2D Uranium Source Model is a site-specific, two-dimensional model developed to simulate the fate and transport of uranium in the 300 Area vadose zone and unconfined groundwater aquifer. The 2D uranium model was used to calculate uranium soil screening levels using an irrigation recharge scenario. Other modeling conditions used for the 2D uranium model are described in ECF-300FF5-11-0151, *Groundwater Flow and Uranium Transport Modeling in Support of the 300 Area FF-5 RI/FS Document.*

STOMP - Battelle Memorial Institute (Battelle) retains copyright on all versions, revisions, and operational modes of the Subsurface Transport Over Multiple Phases (STOMP©) software simulator, as permitted by the U.S. Department of Energy. STOMP© is used here under a limited government use license.

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 sites are not evaluated under this methodology. While sampled, this material does not remain in the location where it is sampled, 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 material, so derived soil screening levels are not appropriate to apply in these instances.

To support this assumption, sensitivity cases were evaluated for the 100-D/H sites in ECF-HANFORD-11-0063 to determine if stockpile material used as backfill would have any impact on the SSLs and PRGs. The initial contaminant distribution model assumed that clean backfill was placed over the remaining soil column. The sensitivity cases assumed the backfill was contaminated to the same level as the remaining soil column. The results of the sensitivity cases showed that the backfill depth and contamination level (even when fully contaminated) did not affect the SSL or PRG values.

For all detected analytes for the 300 Area waste site decision units, the following steps are performed:

1. Obtain unit-length SSLs for the protection of groundwater and the protection of surface water calculated using the STOMP 1D 70:30/100:0 Contaminant Source model and the STOMP 2D Uranium Source Model (note; uranium PRG values are not unit-length).
2. Determine representative lineal dimension in the general direction of groundwater flow for each waste site decision unit in within the 300 Area Source OU.
3. Divide the unit-length SSL by the waste site dimension to obtain an evaluation SSL that is scaled to the waste site dimension in the direction of groundwater flow.
4. Obtain EPC values for each waste site decision unit within the 300 Area Source OU.
5. Individually compare EPCs for each waste site decision unit within the 300 Area Source OU to soil screening levels for the protection of groundwater and the protection of surface water scaled to the waste site lineal dimension in the general direction of groundwater flow, or directly compare without scaling in the case of uranium.

The previous steps are conducted for all detected analytes in the 300 Area Source OU. The following steps are used to provide a list of analytes that also exceed applicable 90th percentile background concentrations.

6. Obtain 90th percentile background values.
7. Compare the EPC value to the applicable lognormal 90th percentile background value.
8. If the EPC is less than or equal to the lognormal 90th percentile background value, then no further comparison is made.
9. If the EPC is greater than the lognormal 90th 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 uranium, is made.

10. If a lognormal 90th 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 uranium, is made.

11. Obtain the estimated quantitation limit for each analyte.

12. Determine if the scaled SSL concentration is less than the lognormal 90th percentile background value and the estimated quantitation limit (EQL). If the scaled SSL concentration is less than the lognormal 90th 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 SSL 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 exceed both the 90th percentile soil background concentration and a soil screening level are considered COPCs and 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 soil screening levels.

Table 4-1. Soil Screening Level References

Soil Screening Level	Pathway	Reference
Groundwater Flow and Uranium Transport Modeling	Groundwater	ECF-300FF5-11-0151
	Surface Water	ECF-300FF5-11-0151
STOMP 1D 70:30/100:0 Contaminant Source Model	Groundwater	ECF-300FF5-11-0153
	Surface Water	ECF-300FF5-11-0153

Notes:

ECF-300FF5-11-0151, *Groundwater Flow and Uranium Transport Modeling in Support of the 300 Area FF-5 RI/FS Document.* The soil screening levels provided 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.

ECF-300FF5-11-0153, *STOMP 1-D Modeling for Determination of Soil Screening Levels and Preliminary Remediation Goals for 300 Area Source Areas.* The uranium soil screening levels provided in this ECF are for a two-dimensional, site-specific model that explicitly account for the downgradient flow direction; these values are not scaled by the representative dimension of the waste site decision unit.

For these analytes, values from Table 4-1 are replaced with values from sources indicated:

- **Arsenic**: the Hanford Site cleanup value for arsenic is 20 mg/kg based on the letter Issues Associated with Establishing Soil Cleanup Levels for Arsenic published by the Department of Ecology Toxics Cleanup Program on June 11, 2013. This letter indicates that the Method A soil cleanup level of 20 mg/kg can be used to define natural background levels when developing Method B soil cleanup levels for the Hanford Site. While the measured 90th percentile background concentration of arsenic in Hanford soils is about 6.47 mg/kg, the value of 20 mg/kg is used as the applicable cleanup level.

- **Total Petroleum Hydrocarbons**: the default screening level for protection of groundwater is obtained from WAC 173-340-900, Table 747-5, "Residual Saturation Screening Levels for TPH.

4.1.1 Soil Screening Levels Protective of Groundwater

Soil screening levels for the protection of groundwater at and near the 300 Area Source OU have been derived using the following model:

- STOMP 1D 70:30/100:0 Contaminant Source Model

With the exception of uranium, the STOMP 1D groundwater protective soil screening levels for all detected analytes in the 300 Area Source OU are provided in Table 4-2 (Attachment A). The STOMP 1D 70:30/100:0 Contaminant Source Model as implemented for determination of 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 soil screening levels protective of groundwater for the 300 Area Source OU calculated using the STOMP 70:30/100:0 Contaminant Source Model are document in ECF-300FF5-11-0153, *STOMP 1-D Modeling for Determination of Soil Screening Levels and Preliminary Remediation Goals for 300 Area Source Areas.*

4.1.2 Uranium Soil Screening Level for Protection of Groundwater

Due to the geochemical complexity of uranium transport in 300 Area Source OU soils, the uranium soil screening level for the protection of groundwater is calculated from peak groundwater concentration of uranium simulated using the STOMP 2D Uranium Source Model as documented in ECF-300FF5-11-0151, *Groundwater Flow and Uranium Transport Modeling in Support of the 300 Area FF-5 RI/FS Document.* The groundwater protective uranium soil screening level is calculated using an irrigation recharge scenario. The groundwater protective soil screening level for uranium is presented in Table 4-2 (Attachment A).

4.1.3 Soil Screening Levels Protective of Surface Water

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. Soil screening levels for the protection of surface water at and near the 300 Area Source OU have been derived using the following model:

- STOMP 1D 70:30/100:0 Contaminant Source Model

With the exception of uranium, the STOMP 1D surface water protective soil screening levels for all detected analytes in the 300 Area Source OU are provided in Table 4-3 (Attachment A). The STOMP 1D 70:30/100:0 Contaminant Source Model as implemented for determination of 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 soil screening levels protective of surface water for the 300 Area Source OU calculated using the STOMP 1D 70:30/100:0 Contaminant Source Model are documented in ECF-300FF5-11-0153.

4.1.4 Uranium Soil Screening Level for Protection of Surface Water

Due to the geochemical complexity of uranium transport in 300 Area Source OU soils, the uranium soil screening level for the protection of surface water is calculated from peak groundwater concentration of uranium simulated using the STOMP 2D Uranium Source Model as documented in ECF-300FF5-11-0151. The surface water protective uranium soil screening level is calculated using an irrigation recharge scenario. The surface water protective soil screening level for uranium is presented in Table 4-3 (Attachment A).

4.2 Updated Distribution Coefficient (K_d Values)

The K_d values for the COPCs listed in Table 4-4 were revised to the updated values listed for river corridor assessments since the 300 Area RI/FS (ECF-Hanford-12-0023, *Groundwater and Surface Water Cleanup Levels and Distribution Coefficients for Nonradiological and Radiological Analytes in the 100 Areas and 300 Area*) was completed. The revised values for these COPCs exceed the 300 Area K_d breakthrough threshold for SSL and PRG values listed in ECF-300FF5-11-0153, and hence would yield "NR" (non-representative) values that will not result in an exceedance. If any exceedances are noted for these COPCs, the exceedance is dismissed based further evaluation due to the updated K_d value.

Table 4-4. Updated Distribution Coefficients

COPC	Updated K_d (mL/g)[a]	Source
Aroclor-1242	78	EPA 2012
Aroclor-1248	77	EPA 2012
Lead	10,000	CLARC 2014
Mercury	52	CLARC 2014
Zinc	62	CLARC 2014

a. ECF-Hanford-12-0023, *Groundwater and Surface Water Cleanup Levels and Distribution Coefficients for Nonradiological and Radiological Analytes in the 100 Areas and 300 Area*, Rev. 3, CH2M Hill Plateau Remediation Company, Richland, Washington.

4.3 Representative Lineal Dimensions

Waste site dimensions parallel to general groundwater flow are determined by review of waste site maps in the relevant cleanup verification packages for waste sites. The analyst would use the waste site maps and scales provided to determine a representative distance in the general direction of groundwater flow based on visual evaluation of water table contours for the vicinity of each waste site. The qualifier "representative" as applied to distance denote that only rarely is a waste site a perfect rectangle oriented to the direction of groundwater flow, which itself is not constant. Thus, a representative lineal distance across the waste site was selected with recognition that irregularly shaped and/or obliquely aligned waste sites will have portions with shorter, and longer, distances across the waste site in the general direction of groundwater flow. The objective was to select a distance that represents an approximate central tendency for the waste site in this dimension for scaling purposes. Some waste site receive additional consideration

in this regard; for example, pipelines and similar features are maintained at 1 m because these lineal features would not be expected to remain aligned to the groundwater flow direction consistently. If additional information provided in the cleanup verification package description provided a basis to infer a more appropriate distance in the general direction of groundwater flow, this would be considered in the evaluation as well. The waste site dimensions for each waste site decision unit are presented in Table 4-5 (Attachment A).

4.4 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 are the analyte-specific values computed from the post-remediation soil sample results for each waste site decision unit in the 300 Area Source OU, as described in ECF-300NPL-11-0137, *Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit*. The EPCs for each waste site decision unit are presented in Table 4-6 (Attachment A) for the 300 Area Source OU.

4.5 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 90th 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 90th 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 (Attachment A).

4.6 Estimated Quantitation Limits

The estimated quantitation limit (EQL) is the lowest concentration that can be reliably measured within specific limits of accuracy and precision under routine laboratory operating conditions. The EQL is specified by the laboratory and is typically 5 – 10 times greater than the method detection limit. In some cases, the EQL is equal to the concentration of the lowest calibration standard. The EQLs presented in this ECF were obtained from DOE/RL-2009-43, *Sampling and Analysis Plan for the 100-FR-1, 100-FR-2, 100-FR-3, 100-IU-2, and 100-IU-6 Operable Units Remedial Investigation/Feasibility Study*, Appendix A. The analyte-specific EQL values are presented in Table 4-2 (Attachment A).Software Applications

Microsoft Excel® was used to tabulate the data in electronic spreadsheets. These spreadsheets are provided as detailed analysis tables that accompany this ECF (Attachment A). Microsoft Excel is used as a desktop utility calculation tool and its use in this ECF meets the following criteria (PRC-PRO-IRM-309):

- Does not contain any macros or programming
- All inputs, formulas, and output data are reviewed during the checking of the calculation
- Each calculation is reviewed and signed

As such, the controlled software procedure requirements do not apply for this software application.

5 Calculation

Contaminants of potential concern for groundwater protection and surface water protection at the 300 Area Source OU are identified by comparing EPCs to soil screening levels and background concentrations, as described in Section 3. Comparison results are provided in summary in Section 7 and in full in Attachment A. 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.

6 Results/Conclusions

A summary of the 300 Area Source OU waste site decision unit EPCs that exceed soil screening levels for groundwater protection and surface water protection, *without consideration of soil background concentrations*, are presented in Tables 7-1 and 7-2, respectively.

A comparison of EPCs for waste site decision units in 300 Area source OUs to Hanford Site soil background values is presented in Table 7-3.

A summary of the 300 Area Source OU waste site decision unit EPCs that exceed soil screening levels for groundwater protection and surface water protection, *as well as soil background concentrations*, are presented in Tables 7-4 and 7-5, respectively. Unit-length SSLs are scaled by the representative length of each waste site decision unit in the general direction of groundwater flow for comparison to EPC values.

Analytes that have an EPC that exceeds both the 90th percentile background concentration as well as a soil screening level, and that are not dismissed after further evaluation, are considered COPCs to be carried forward for further analysis. These exceedance values are highlighted in Table 7-4 and 7-5.

® Microsoft Excel is a registered product of the Microsoft Corporation.

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Attachment A

Detailed Analysis Tables

Table 4-2. Summary of Groundwater Protective Soil Screening Levels for the 300 Area Source Operable Unit

Analyte	CAS No.	Distribution Coefficient (K_d) Value (mL/g)[a]	Required Detection Limit (pCi/g, µg/kg)[b]	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection (pCi·m/g, µg·m/kg)[c]
Radionuclides				
Americium-241	14596-10-2	200	1.0	--[d]
Cesium-137	10045-97-3	50	0.10	--[d]
Cobalt-60	10198-40-0	50	0.050	--[d]
Europium-155	14391-16-3	200	0.10	--[d]
Plutonium-238	13981-16-3	200	1.0	--[d]
Plutonium-239/240	PU-239/240	200	1.0	--[d]
Plutonium-241	14119-32-5	200	1.0	--[d]
Total beta radiostrontium	SR-RAD	25	--	227,428
Tritium	10028-17-8	0	--	9,176
Uranium-233/234	U-233/234	2.0	1.0	--[e]
Uranium-235	15117-96-1	2.0	0.50	--[e]
Uranium-238	U-238	2.0	1.0	--[e]
Nonradionuclides				
1,1,2,2-Tetrachloroethane	79-34-5	0.079	0.0050	270
1,2,4-Trichlorobenzene	120-82-1	1.7	0.33	28,655
1,4-Dichlorobenzene	106-46-7	0.62	0.0050	61,744
2,4-Dinitrotoluene	121-14-2	0.096	0.33	402
2-Butanone	78-93-3	0.0045	0.010	1.67E+06
2-Butoxyethanol	111-76-2	0.0010	--	251,308
2-Chlorophenol	95-57-8	0.39	0.33	194,372
2-Methylnaphthalene	91-57-6	3.0	0.33	1.07E+06
4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	86	0.0033	--[d]
4-Chloro-3-methylphenol	59-50-7	0.49	0.33	9.78E+06
Acenaphthene	83-32-9	6.1	0.10	3.69E+07
Acetone	67-64-1	6.00E-04	0.020	2.23E+06
Aldrin	309-00-2	49	0.0017	7,793
Alpha-BHC	319-84-6	1.8	0.0017	285
Aluminum	7429-90-5	1,500	5.0	--[d]
Anthracene	120-12-7	24	0.050	--[d]
Antimony	7440-36-0	3.8	0.60	270,034
Aroclor-1016	12674-11-2	107	0.017	--[d]
Aroclor-1221	11104-28-2	10	0.017	2,903
Aroclor-1232	11141-16-5	10	0.017	2,903
Aroclor-1242	53469-21-9	45	0.017	97,738
Aroclor-1248	12672-29-6	44	0.017	91,112
Aroclor-1254	11097-69-1	76	0.017	--[d]
Aroclor-1260	11096-82-5	822	0.017	--[d]
Arsenic	7440-38-2	29	1.0	37,999
Barium	7440-39-3	25	0.50	--[d]
Benzo(a)anthracene	56-55-3	360	0.015	--[d]
Benzo(a)pyrene	50-32-8	5,500	0.015	--[d]
Benzo(b)fluoranthene	205-99-2	803	0.015	--[d]
Benzo(k)fluoranthene	207-08-9	1,230	0.015	--[d]
Beryllium	7440-41-7	790	0.20	--[d]
Bis(2-ethylhexyl) phthalate	117-81-7	110	0.33	--[d]
Boron	7440-42-8	3.0	2.0	1.08E+08
Butylbenzylphthalate	85-68-7	14	0.33	8.41E+06
Cadmium	7440-43-9	30	0.20	3.52E+06
Chlordane	57-74-9	51	0.017	--[d]
Chloroform	67-66-3	0.053	0.0050	1,289
Chromium	7440-47-3	200	0.20	--[d]
Chrysene	218-01-9	200	0.10	--[d]
Cobalt	7440-48-4	50	2.0	--[d]
Copper	7440-50-8	22	1.0	2.41E+08
Dibenz[a,h]anthracene	53-70-3	1,790	0.030	--[d]

Table 4-2. Summary of Groundwater Protective Soil Screening Levels for the 300 Area Source Operable Unit

Analyte	CAS No.	Distribution Coefficient (K_d) Value (mL/g)[a]	Required Detection Limit (pCi/g, µg/kg)[b]	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection (pCi·m/g, µg·m/kg)[c]
Dibenzofuran	132-64-9	11	0.33	1.16E+06
Dieldrin	60-57-1	26	0.0033	2,733
Diethyl ether	60-29-7	0.0097	--	664,052
Di-n-butylphthalate	84-74-2	1.6	0.33	2.85E+07
Endosulfan I	959-98-8	2.0	0.0017	2.46E+06
Endosulfan II	33213-65-9	2.0	0.0033	2.46E+06
Fluoranthene	206-44-0	49	0.050	--[d]
Fluorene	86-73-7	7.7	0.030	3.08E+07
Fluoride	16984-48-8	150	5.0	--[d]
Heptachlor epoxide	1024-57-3	83	0.0017	--[d]
Hexachlorobutadiene	87-68-3	54	0.33	--[d]
Hexachloroethane	67-72-1	1.8	0.33	22,916
Hexavalent Chromium	18540-29-9	0.80	--	6,000[f]
Indeno(1,2,3-cd)pyrene	193-39-5	3,470	0.030	--[d]
Iron	7439-89-6	25	5.0	NR
Lead	7439-92-1	30	0.50	1.06E+07
Lithium	7439-93-2	50	2.5	--[d]
Manganese	7439-96-5	50	5.0	--[d]
Mercury	7439-97-6	30	--	1.41E+06
Methoxychlor	72-43-5	80	0.017	--[d]
Methylene chloride	75-09-2	0.010	0.0050	2,098
Molybdenum	7439-98-7	20	2.0	2.58E+07
Naphthalene	91-20-3	1.2	0.10	2.26E+06
Nickel	7440-02-0	65	4.0	--[d]
Nitrate	14797-55-8	0	2.5	1.36E+07
Nitrogen in Nitrite and Nitrate	NO2+NO3-N	0	--	3.03E+06
n-Nitrosodi-n-dipropylamine	621-64-7	0.024	0.33	330
Pentachlorophenol	87-86-5	0.59	0.33	1,613
Phenol	108-95-2	0.029	0.33	1.49E+06
Pyrene	129-00-0	68	0.050	--[d]
Selenium	7782-49-2	5.0	1.0	3.02E+06
Silver	7440-22-4	90	0.20	--[d]
Strontium	7440-24-6	25	1.0	--[d]
Tetrachloroethene	127-18-4	0.27	0.0050	16,996
Tin	7440-31-5	130	10	--[d]
Toluene	108-88-3	0.14	0.0050	1.15E+06
Total petroleum hydrocarbons - diesel range	TPHDIESEL	--	--	2.00E+06[g]
Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	--	--	2.00E+06[g]
Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	--	--	2.00E+06[g]
Total_U_Isotopes	Total_U_Isotopes	--	--	101,630[h]
Trichloroethene	79-01-6	0.094	0.0050	1,334
Trichloromonofluoromethane	75-69-4	0.044	--	1.95E+06
Uranium	7440-61-1	2.0	--	101,630[h]
Vanadium	7440-62-2	1,000	2.5	--[d]
Zinc	7440-66-6	30	1.0	--[d]

Notes:

a. Distribution coefficient (Kd) values are taken preferentially from DOE/RL-96-17 (Table E-2) as described in ECF-HANFORD-12-0023. The Kd value for arsenic is taken from the Ecology CLRAC database (Ecology 2012).

b. Estimated quantitation limits (EQLs) are obtained from DOE/RL-2009-45 (Appendix A). The STOMP 1D soil screening level for all analytes defaults to the EQL when the calculated value is less than the EQL.

c. ECF-300FF5-11-0153, A 70:30 source distribtuion is used for analytes with Kd ≥ 2 mL/g; a 100:0 source distribution is used for analytes with Kd < 2 mL/g.

Table 4-2. Summary of Groundwater Protective Soil Screening Levels for the 300 Area Source Operable Unit

Analyte	CAS No.	Distribution Coefficient (K_d) Value (mL/g)[a]	Required Detection Limit (pCi/g, µg/kg)[b]	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection (pCi·m/g, µg·m/kg)[c]

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. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and then summing to provide a mass-based total uranium exposure point concentration (identified as Total_U_Isotopes), as described in ECF-300NPL-11-0137.

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 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."

h. Due to the complex geochemistry of uranium in 300 Area source operable unit soils, uranium SSLs were derived using a site-speicific two-dimensional model as described in ECF-300FF5-11-0151.

-- = Not Applicable

DOE/RL-96-17, *Remedial Design Report/Remedial Action Work Plan for the 100 Area.*

DOE/RL-2009-45, *300 Area Remedial Investigation/Feasibility Study Sampling and Analysis Plan for the 300-FF-1, 300-FF-2, and 300-FF-5 Operable Units.*

ECF-300FF5-11-0151, *Groundwater Flow and Uranium Transport Modeling in Support of the 300 Area FF-5 RI/FS Document.*

ECF-300FFS-11-0153, *STOMP 1-D Modeling for Determination of Soil Screening Levels and Prellminary Remediation Goals for 300 Area Source Areas.*

ECF-300NPL-11-0137, *Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit.*

ECF-HANFORD-12-0023, *Groundwater and Surface Water Cleanup Levels and Distribution Coefficients for Nonradiological and Radiological Analytes in the 100 Areas and 300 Area .*

Ecology, 2012, "CLARC Cleanup Levels and Risk Calculations," Washington State Department of Ecology Web-based application available at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx.

Table 4-3. Summary of Surface Water Protective Soil Screening Levels for the 300 Area Source Operable Unit

Analyte	CAS No.	Distribution Coefficient (K_d) Value (mL/g)[a]	Required Detection Limit (pCi/g, µg/kg)[b]	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection (pCi·m/g, µg·m/kg)[c]
Radionuclides				
Americium-241	14596-10-2	200	1.0	--[d]
Cesium-137	10045-97-3	50	0.10	--[d]
Cobalt-60	10198-40-0	50	0.050	--[d]
Europium-155	14391-16-3	200	0.10	--[d]
Plutonium-238	13981-16-3	200	1.0	--[d]
Plutonium-239/240	PU-239/240	200	1.0	--[d]
Plutonium-241	14119-32-5	200	1.0	--[d]
Total beta radiostrontium	SR-RAD	25	--	227,428
Tritium	10028-17-8	0	--	9,176
Uranium-233/234	U-233/234	2.0	1.0	--[e]
Uranium-235	15117-96-1	2.0	0.50	--[e]
Uranium-238	U-238	2.0	1.0	--[e]
Nonradionuclides				
1,1,2,2-Tetrachloroethane	79-34-5	0.079	0.0050	210
1,2,4-Trichlorobenzene	120-82-1	1.7	0.33	37,238
1,4-Dichlorobenzene	106-46-7	0.62	0.0050	164,520
2,4-Dinitrotoluene	121-14-2	0.096	0.33	330
2-Butanone	78-93-3	0.0045	0.010	1.71E+08
2-Butoxyethanol	111-76-2	0.0010	--	2.58E+07
2-Chlorophenol	95-57-8	0.39	0.33	393,603
2-Methylnaphthalene	91-57-6	3.0	0.33	4.65E+06
4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	86	0.0033	--[d]
4-Chloro-3-methylphenol	59-50-7	0.49	0.33	1.87E+08
Acenaphthene	83-32-9	6.1	0.10	4.94E+07
Acetone	67-64-1	6.00E-04	0.020	2.28E+08
Aldrin	309-00-2	49	0.0017	148
Alpha-BHC	319-84-6	1.8	0.0017	53
Aluminum	7429-90-5	1,500	5.0	--[d]
Anthracene	120-12-7	24	0.050	--[d]
Antimony	7440-36-0	3.8	0.60	252,032
Aroclor-1016	12674-11-2	107	0.017	--[d]
Aroclor-1221	11104-28-2	10	0.017	17
Aroclor-1232	11141-16-5	10	0.017	17
Aroclor-1242	53469-21-9	45	0.017	143
Aroclor-1248	12672-29-6	44	0.017	133
Aroclor-1254	11097-69-1	76	0.017	--[d]
Aroclor-1260	11096-82-5	822	0.017	--[d]
Arsenic	7440-38-2	29	1.0	11,726
Barium	7440-39-3	25	0.50	--[d]
Benzo(a)anthracene	56-55-3	360	0.015	--[d]
Benzo(a)pyrene	50-32-8	5,500	0.015	--[d]
Benzo(b)fluoranthene	205-99-2	803	0.015	--[d]
Benzo(k)fluoranthene	207-08-9	1,230	0.015	--[d]
Beryllium	7440-41-7	790	0.20	--[d]
Bis(2-ethylhexyl) phthalate	117-81-7	110	0.33	--[d]
Boron	7440-42-8	3.0	2.0	--[f]
Butylbenzylphthalate	85-68-7	14	0.33	1.50E+06
Cadmium	7440-43-9	30	0.20	176,066
Chlordane	57-74-9	51	0.017	--[d]
Chloroform	67-66-3	0.053	0.0050	5,207

Table 4-3. Summary of Surface Water Protective Soil Screening Levels for the 300 Area Source Operable Unit

Analyte	CAS No.	Distribution Coefficient (K_d) Value (mL/g)[a]	Required Detection Limit (pCi/g, µg/kg)[b]	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection (pCi·m/g, µg·m/kg)[c]
Chromium	7440-47-3	200	0.20	--[d]
Chrysene	218-01-9	200	0.10	--[d]
Cobalt	7440-48-4	50	2.0	--[d]
Copper	7440-50-8	22	1.0	3.40E+06
Dibenz[a,h]anthracene	53-70-3	1,790	0.030	--[d]
Dibenzofuran	132-64-9	11	0.33	246,969
Dieldrin	60-57-1	26	0.0033	26
Diethyl ether	60-29-7	0.0097	--	3.98E+07
Di-n-butylphthalate	84-74-2	1.6	0.33	3.56E+07
Endosulfan I	959-98-8	2.0	0.0017	1,433
Endosulfan II	33213-65-9	2.0	0.0033	1,433
Fluoranthene	206-44-0	49	0.050	2.82E+08
Fluorene	86-73-7	7.7	0.030	1.06E+08
Fluoride	16984-48-8	150	5.0	--[d]
Heptachlor epoxide	1024-57-3	83	0.0017	--[d]
Hexachlorobutadiene	87-68-3	54	0.33	--[d]
Hexachloroethane	67-72-1	1.8	0.33	29,166
Hexavalent Chromium	18540-29-9	0.80	--	6,000[g]
Indeno(1,2,3-cd)pyrene	193-39-5	3,470	0.030	--[d]
Iron	7439-89-6	25	5.0	1.43E+08
Lead	7439-92-1	30	0.50	1.48E+06
Lithium	7439-93-2	50	2.5	--[f]
Manganese	7439-96-5	50	5.0	--[d]
Mercury	7439-97-6	30	--	8,451
Methoxychlor	72-43-5	80	0.017	--[d]
Methylene chloride	75-09-2	0.010	0.0050	1,931
Molybdenum	7439-98-7	20	2.0	--[d]
Naphthalene	91-20-3	1.2	0.10	6.97E+07
Nickel	7440-02-0	65	4.0	--[d]
Nitrate	14797-55-8	0	2.5	1.36E+07
Nitrogen in Nitrite and Nitrate	NO2+NO3-N	0	--	3.03E+06
n-Nitrosodi-n-dipropylamine	621-64-7	0.024	0.33	330
Pentachlorophenol	87-86-5	0.59	0.33	1,980
Phenol	108-95-2	0.029	0.33	6.21E+06
Pyrene	129-00-0	68	0.050	--[d]
Selenium	7782-49-2	5.0	1.0	302,457
Silver	7440-22-4	90	0.20	--[d]
Strontium	7440-24-6	25	1.0	--[d]
Tetrachloroethene	127-18-4	0.27	0.0050	2,345
Tin	7440-31-5	130	10	--[d]
Toluene	108-88-3	0.14	0.0050	2.35E+06
Total petroleum hydrocarbons - diesel range	TPHDIESEL	--	--	--[f]
Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	--	--	--[f]
Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	--	--	--[f]
Total_U_Isotopes	Total_U_Isotopes	--	--	2.64E+06[h]
Trichloroethene	79-01-6	0.094	0.0050	3,511
Trichloromonofluoromethane	75-69-4	0.044	--	2.90E+07
Uranium	7440-61-1	2.0	--	2.64E+06[h]
Vanadium	7440-62-2	1,000	2.5	--[f]
Zinc	7440-66-6	30	1.0	6.41E+07

Table 4-3. Summary of Surface Water Protective Soil Screening Levels for the 300 Area Source Operable Unit

Analyte	CAS No.	Distribution Coefficient (K_d) Value (mL/g)[a]	Required Detection Limit (pCi/g, µg/kg)[b]	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection (pCi·m/g, µg·m/kg)[c]

Notes:

a. Distribution coefficient (Kd) values are taken preferentially from DOE/RL-96-17 (Table E-2) as described in ECF-HANFORD-12-0023. The Kd value for arsenic is taken from the Ecology CLRAC database (Ecology 2012).

b. Estimated quantitation limits (EQLs) are obtained from DOE/RL-2009-45 (Appendix A). The STOMP 1D soil screening level for all analytes defaults to the EQL when the calculated value is less than the EQL.

c. ECF-300FF5-11-0153, A 70:30 source distribtuion is used for analytes with Kd ≥ 2 mL/g; a 100:0 source distribution is used for analytes with Kd < 2 mL/g.

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. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and then summing to provide a mass-based total uranium exposure point concentration (identified as Total_U_Isotopes), as described in ECF-300NPL-11-0137.

f. A soil screening level is not calculated because a surface water cleanup level or surface water standard is not available for the analyte.

g. 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.

h. Due to the complex geochemistry of uranium in 300 Area source operable unit soils, uranium SSLs were derived using a site-speicific two-dimensional model as described in ECF-300FF5-11-0151.

-- = Not Applicable

DOE/RL-96-17, *Remedial Design Report/Remedial Action Work Plan for the 100 Area.*

DOE/RL-2009-45, *300 Area Remedial Investigation/Feasibility Study Sampling and Analysis Plan for the 300-FF-1, 300-FF-2, and 300-FF-5 Operable Units.*

ECF-300FF5-11-0151, *Groundwater Flow and Uranium Transport Modeling in Support of the 300 Area FF-5 RI/FS Document.*

ECF-300FF5-11-0153, *STOMP 1-D Modeling for Determination of Soil Screening Levels and Preliminary Remediation Goals for 300 Area Source Areas.*

ECF-300NPL-11-0137, *Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit.*

ECF-HANFORD-12-0023, *Groundwater and Surface Water Cleanup Levels and Distribution Coefficients for Nonradiological and Radiological Analytes in the 100 Areas and 300 Area .*

Ecology, 2012, "CLARC Cleanup Levels and Risk Calculations," Washington State Department of Ecology Web-based application available at https://fortress.wa.gov/ecy/clarc/CLARCHome.aspx.

Table 4-5. Representative Length of Waste Site Decision Units in the General Direction of Groundwater Flow

300 OU Waste Site/Decision Units	Representative Length (m)	Source of Site Length
300 ASH PITS_Shallow	50.0	QMAP along GW gradient
300 VTS_Shallow	24.7	Sampling Maps (using scale)
300-10_Shallow_Focused	38.6	Sampling Maps (using scale)
300-109_Shallow_Focused	1.0	Sampling Locations
300-109_Staging Pile Area_Focused	1.0	Sampling Locations
300-18_Shallow	13.5	Sampling Maps (using scale)
300-223_Shallow_Focused	1.0	No Information
300-23_Shallow_Focused	5.0	Sampling Locations
300-259_Shallow	58.3	Sampling Locations
300-260_Shallow_Focused	33.0	Sampling Locations
300-272_Overburden_Focused	1.0	No Information
300-272_Shallow_Focused	1.0	No Information
300-275_Shallow_1	43.0	Sampling Locations
300-275_Shallow_2	7.9	Sampling Locations
300-33, 300-41, 300-256_Shallow	117.4	Sampling Locations
300-33, 300-41, 300-256_Shallow_Focused	68.5	Sampling Locations
300-37_Shallow_Focused	1.0	No Information
300-44_Overburden_Focused	1.0	No Information
300-44_Shallow_Focused	1.0	Sampling Locations
300-45_Shallow_Focused	5.0	Sampling Locations
300-49_Overburden	5.0	QMAP along GW gradient
300-49_Shallow	75.0	Sampling Maps (using scale)
300-50_Overburden	15.0	Sampling Maps (using scale) NW/SE
300-50_Shallow	50.0	Sampling Maps (using scale) NW/SE
300-8_Shallow	136.7	Sampling Maps (using scale)
316-1_Overburden	20.0	Not mapped; assumed 20 m
316-1_Shallow_1	60.0	Assume Shallow_1 is "ACL"; Scaling Maps W/E
316-1_Shallow_3	50.0	Assume Shallow_3 is "BCL"; Scaling Maps W/E
316-1_Shallow_4	30.0	Sampling Maps (for trenches) estimated W/E from Scale
316-2_Shallow_1	71.0	Sampling Locations
316-2_Shallow_2	117.0	Sampling Locations
316-2_Shallow_3	167.5	Sampling Locations
316-5_Shallow_1	68.0	Sampling Maps (using scale)
316-5_Shallow_2	68.0	Sampling Maps (using scale)
316-5_Shallow_Focused	68.0	Sampling Maps (using scale)
331 LSLDF_Shallow_Focused	1.0	Sampling Maps (using scale)
600-243_Shallow	40.3	Sampling Locations
600-259_Overburden	10.3	Sampling Maps (using scale)
600-259_Shallow	17.0	Sampling Maps (using scale)
600-259_Shallow_Focused	17.0	Sampling Maps (using scale)
600-47_Shallow	22.0	Sampling Maps (using scale)
618-1_Deep	32.0	Sampling Locations (using scale) W/E
618-1_Deep_Focused	25.0	Sampling Maps (using scale); approx. E/W net
618-1_Shallow	40.0	Sampling Locations (using scale) approx. W/E
618-1_Shallow_Focused	40.0	Sampling Locations (using scale) approx. W/E
618-12_Shallow	130.0	Sampling Locations
618-13_Shallow	40.0	Sampling Maps (using scale)
618-13_Shallow_Focused	40.0	Sampling Maps (using scale)
618-2_Deep	47.7	Sampling Maps (using scale)
618-2_Deep_Focused	47.7	Sampling Maps (using scale)
618-2_Overburden	35.2	Sampling Maps (using scale)
618-2_Shallow	60.2	Sampling Maps (using scale)

Table 4-5. Representative Length of Waste Site Decision Units in the General Direction of Groundwater Flow

300 OU Waste Site/Decision Units	Representative Length (m)	Source of Site Length
618-2_Staging Pile	140.0	Sampling Maps (using scale)
618-3_Shallow	52.3	Sampling Maps (using scale)
618-3_Shallow_Focused	52.3	Sampling Maps (using scale)
618-4_Deep	47.3	Sampling Maps (using scale)
618-4_Deep_Focused	47.3	Sampling Maps (using scale)
618-4_Overburden_2	20.0	Sampling Maps (using scale)
618-4_Overburden_3	16.8	Sampling Maps (using scale)
618-4_Overburden_4	33.0	Sampling Maps (using scale)
618-4_Shallow	30.0	Sampling Maps (using scale) approx. NW/SE
618-5_Deep	34.2	Sampling Locations
618-5_Deep_Focused	14.1	Sampling Locations
618-5_Overburden	42.1	Sampling Locations
618-5_Shallow	50.0	QMAP along GW gradient NW/SE
618-5_Staging Pile_4	13.7	Sampling Locations
618-5_Staging Pile_5	88.3	Sampling Locations
618-7_Shallow_1	92.0	Sampling Maps (using scale)
618-7_Shallow_2	11.0	Sampling Maps (using scale)
618-7_Shallow_3	21.0	Sampling Maps (using scale)
618-7_Shallow_4	48.0	Sampling Maps (using scale)
618-7_Shallow_Focused	240.0	Sampling Maps (using scale)
618-8_Shallow	28.8	Sampling Maps (using scale)
618-9_Shallow_Focused	7.0	Sampling Maps (using scale)
628-4_Overburden	49.0	Sampling Maps (using scale)
628-4_Shallow	49.0	Sampling Maps (using scale)
UPR-300-17_Shallow	8.0	Sampling Maps (using scale)
UPR-300-46_Shallow	21.0	Sampling Maps (using scale)

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
300 ASH PITS_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	52
300 ASH PITS_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,078
300 ASH PITS_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	96
300 ASH PITS_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	76
300 ASH PITS_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,450
300 ASH PITS_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.039
300 ASH PITS_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82
300 VTS_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.029
300-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	13,500
300-10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	200
300-10_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	230
300-10_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,078
300-10_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16
300-10_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.041
300-10_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4
300-109_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.62E+06
300-109_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	122
300-109_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	40
300-109_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,420
300-109_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	63,300
300-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.2
300-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.3
300-109_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	180
300-109_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	632
300-109_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	59
300-109_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,950
300-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.8
300-109_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,420
300-109_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,800
300-109_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	14
300-109_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.75E+07
300-109_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	2,890
300-109_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	278,000
300-109_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	22
300-109_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	341
300-109_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,490
300-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1.6
300-109_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,108
300-109_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,600
300-109_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,700
300-109_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4
300-109_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4
300-109_Staging Pile Area_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.78E+06
300-109_Staging Pile Area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	37
300-109_Staging Pile Area_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	19
300-109_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,580
300-109_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	µg/kg	72,700
300-109_Staging Pile Area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.1
300-109_Staging Pile Area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.3
300-109_Staging Pile Area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.3
300-109_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	203
300-109_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,060
300-109_Staging Pile Area_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	66
300-109_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,170
300-109_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,950
300-109_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	µg/kg	11,600
300-109_Staging Pile Area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	5.1
300-109_Staging Pile Area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	29
300-109_Staging Pile Area_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.84E+07
300-109_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	µg/kg	5,030
300-109_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	µg/kg	286,000
300-109_Staging Pile Area_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	408
300-109_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,570
300-109_Staging Pile Area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	7.0
300-109_Staging Pile Area_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,450
300-109_Staging Pile Area_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,877
300-109_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	45,100
300-109_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	µg/kg	48,800
300-109_Staging Pile Area_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	2.5
300-109_Staging Pile Area_Focused	Rad	Uranium-238	U-238	pCi/g	2.3
300-18_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,200
300-18_Shallow	non-Rad	Barium	7440-39-3	µg/kg	63,400
300-18_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	650
300-18_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	40
300-18_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	6,900
300-18_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,600
300-18_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,136
300-18_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.65
300-18_Shallow	Rad	Uranium-238	U-238	pCi/g	0.41
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	120,000
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	230,000
300-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	52,000
300-259_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	5.99E+06

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
300-259_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	322
300-259_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,096
300-259_Shallow	non-Rad	Barium	7440-39-3	µg/kg	75,232
300-259_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	226
300-259_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,303
300-259_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	252
300-259_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,901
300-259_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,831
300-259_Shallow	non-Rad	Copper	7440-50-8	µg/kg	10,692
300-259_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07
300-259_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,625
300-259_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	318,874
300-259_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	10
300-259_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	303
300-259_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,751
300-259_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,876
300-259_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,626
300-259_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	479,584
300-259_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.6
300-259_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3
300-260_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.17E+06
300-260_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	922
300-260_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,160
300-260_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	122,000
300-260_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	239
300-260_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,360
300-260_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	110
300-260_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,890
300-260_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,430
300-260_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	73,300
300-260_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.04E+07
300-260_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	18,300
300-260_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	328,000
300-260_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	12
300-260_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	537
300-260_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200
300-260_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	206
300-260_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,800
300-260_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,000
300-260_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	77,400
300-260_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.25
300-260_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	4.3
300-272_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	13,100
300-272_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	43,100
300-275_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	960
300-275_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.61E+06
300-275_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	260
300-275_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	2,211
300-275_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	75,261
300-275_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.3
300-275_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.9
300-275_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	452
300-275_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,466
300-275_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	83
300-275_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,022
300-275_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	2.2
300-275_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	5,847
300-275_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	42,923
300-275_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	2,300
300-275_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	81
300-275_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07
300-275_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	7,189
300-275_Shallow_1	non-Rad	Lithium	7439-93-2	µg/kg	6,686
300-275_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	276,815
300-275_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	17
300-275_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	378
300-275_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	9,461
300-275_Shallow_1	non-Rad	Silver	7440-22-4	µg/kg	121
300-275_Shallow_1	non-Rad	Strontium	7440-24-6	µg/kg	20,196
300-275_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,483
300-275_Shallow_1	non-Rad	Uranium	7440-61-1	µg/kg	2,500
300-275_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	45,128
300-275_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	41,014
300-275_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.046
300-275_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	7.7
300-275_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.0
300-275_Shallow_1	Rad	Uranium-238	U-238	pCi/g	7.4
300-275_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	3.6
300-275_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	6.24E+06
300-275_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,761
300-275_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	68,607
300-275_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	254
300-275_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	1,147

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
300-275_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	144
300-275_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	8,994
300-275_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	5,977
300-275_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	11,596
300-275_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	56
300-275_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	2.6
300-275_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07
300-275_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	4,099
300-275_Shallow_2	non-Rad	Lithium	7439-93-2	µg/kg	7,067
300-275_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	292,731
300-275_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	28
300-275_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	404
300-275_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	9,593
300-275_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	27,081
300-275_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,149
300-275_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,725
300-275_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	51,632
300-275_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	41,245
300-275_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3
300-275_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	0.24
300-275_Shallow_2	Rad	Uranium-238	U-238	pCi/g	1.2
300-33, 300-41, 300-256_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.32E+06
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1016	12674-11-2	µg/kg	10
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	16
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	190
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	84
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17
300-33, 300-41, 300-256_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,638
300-33, 300-41, 300-256_Shallow	non-Rad	Barium	7440-39-3	µg/kg	72,411
300-33, 300-41, 300-256_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	256
300-33, 300-41, 300-256_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,484
300-33, 300-41, 300-256_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	228
300-33, 300-41, 300-256_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	94
300-33, 300-41, 300-256_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,781
300-33, 300-41, 300-256_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,273
300-33, 300-41, 300-256_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,662
300-33, 300-41, 300-256_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	1,651
300-33, 300-41, 300-256_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.00E+07
300-33, 300-41, 300-256_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,268
300-33, 300-41, 300-256_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	5,495
300-33, 300-41, 300-256_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	314,762
300-33, 300-41, 300-256_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	16
300-33, 300-41, 300-256_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	2.9
300-33, 300-41, 300-256_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	486
300-33, 300-41, 300-256_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,880
300-33, 300-41, 300-256_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	8,617
300-33, 300-41, 300-256_Shallow	non-Rad	Silver	7440-22-4	µg/kg	782
300-33, 300-41, 300-256_Shallow	non-Rad	Uranium	7440-61-1	µg/kg	7,260
300-33, 300-41, 300-256_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	52,694
300-33, 300-41, 300-256_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,462
300-33, 300-41, 300-256_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.1
300-33, 300-41, 300-256_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.34
300-33, 300-41, 300-256_Shallow	Rad	Uranium-238	U-238	pCi/g	2.1
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.51E+06
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	330
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	385
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,240
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	64,600
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	169
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,030
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	100
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,080
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,640
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,400
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	1,300
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.86E+07
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,160
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	6,580
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	259,000
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	275
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,040
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	17,900
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,460
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	51,400
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	38,900
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	3.0
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	2.2
300-37_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	100
300-37_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,200
300-44_Overburden_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	9,100
300-44_Overburden_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,027

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
300-44_Overburden_Focused	Rad	Uranium-238	U-238	pCi/g	0.35
300-44_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.71E+06
300-44_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	4,100
300-44_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	16,900
300-44_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	75,200
300-44_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	480
300-44_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,300
300-44_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,200
300-44_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	7,800
300-44_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.94E+07
300-44_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	303,000
300-44_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,600
300-44_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	872
300-44_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,200
300-44_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,800
300-44_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.29
300-45_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	86
300-45_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	290
300-45_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,600
300-45_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.023
300-45_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.061
300-45_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2
300-49_Overburden	non-Rad	1,2,4-Trichlorobenzene	120-82-1	µg/kg	31
300-49_Overburden	non-Rad	1,4-Dichlorobenzene	106-46-7	µg/kg	29
300-49_Overburden	non-Rad	2,4-Dinitrotoluene	121-14-2	µg/kg	19
300-49_Overburden	non-Rad	2-Chlorophenol	95-57-8	µg/kg	51
300-49_Overburden	non-Rad	4-Chloro-3-methylphenol	59-50-7	µg/kg	46
300-49_Overburden	non-Rad	Acenaphthene	83-32-9	µg/kg	31
300-49_Overburden	non-Rad	Aluminum	7429-90-5	µg/kg	6.30E+06
300-49_Overburden	non-Rad	Antimony	7440-36-0	µg/kg	232
300-49_Overburden	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,008
300-49_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,291
300-49_Overburden	non-Rad	Barium	7440-39-3	µg/kg	76,068
300-49_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	201
300-49_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	174
300-49_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	18,106
300-49_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	7,127
300-49_Overburden	non-Rad	Copper	7440-50-8	µg/kg	536,000
300-49_Overburden	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	52
300-49_Overburden	non-Rad	Iron	7439-89-6	µg/kg	2.08E+07
300-49_Overburden	non-Rad	Lead	7439-92-1	µg/kg	36,964
300-49_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	316,669
300-49_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	13,035
300-49_Overburden	non-Rad	n-Nitrosodi-n-dipropylamine	621-64-7	µg/kg	40
300-49_Overburden	non-Rad	Pentachlorophenol	87-86-5	µg/kg	50
300-49_Overburden	non-Rad	Phenol	108-95-2	µg/kg	50
300-49_Overburden	non-Rad	Pyrene	129-00-0	µg/kg	40
300-49_Overburden	non-Rad	Silver	7440-22-4	µg/kg	703
300-49_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,066
300-49_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	50,380
300-49_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	141,984
300-49_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	1.0
300-49_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	0.057
300-49_Overburden	Rad	Uranium-238	U-238	pCi/g	1.0
300-49_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.92E+06
300-49_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	176
300-49_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,431
300-49_Shallow	non-Rad	Barium	7440-39-3	µg/kg	89,874
300-49_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	303
300-49_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,170
300-49_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,323
300-49_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,870
300-49_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.59E+07
300-49_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,629
300-49_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	361,805
300-49_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,664
300-49_Shallow	non-Rad	Silver	7440-22-4	µg/kg	621
300-49_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,983
300-49_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	58,672
300-49_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	54,651
300-49_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.15
300-49_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.3
300-49_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24
300-49_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1
300-50_Overburden	non-Rad	Aluminum	7429-90-5	µg/kg	6.68E+06
300-50_Overburden	non-Rad	Aroclor-1254	11097-69-1	µg/kg	33
300-50_Overburden	non-Rad	Aroclor-1260	11096-82-5	µg/kg	229
300-50_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	6,897
300-50_Overburden	non-Rad	Barium	7440-39-3	µg/kg	117,742
300-50_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	325
300-50_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	563
300-50_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	12,197
300-50_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	9,389

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
300-50_Overburden	non-Rad	Copper	7440-50-8	µg/kg	64,527
300-50_Overburden	non-Rad	Iron	7439-89-6	µg/kg	1.90E+07
300-50_Overburden	non-Rad	Lead	7439-92-1	µg/kg	5,905
300-50_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	314,271
300-50_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	15,229
300-50_Overburden	non-Rad	Silver	7440-22-4	µg/kg	1,202
300-50_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	17,919
300-50_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	45,243
300-50_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	45,889
300-50_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.056
300-50_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	6.0
300-50_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	0.45
300-50_Overburden	Rad	Uranium-238	U-238	pCi/g	6.0
300-50_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.88E+06
300-50_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	3,000
300-50_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	126
300-50_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,403
300-50_Shallow	non-Rad	Barium	7440-39-3	µg/kg	103,029
300-50_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	282
300-50_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	19
300-50_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	463
300-50_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	16,841
300-50_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,109
300-50_Shallow	non-Rad	Copper	7440-50-8	µg/kg	16,820
300-50_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07
300-50_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,381
300-50_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	318,120
300-50_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,413
300-50_Shallow	non-Rad	Silver	7440-22-4	µg/kg	2,992
300-50_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,938
300-50_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,964
300-50_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,344
300-50_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.056
300-50_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	7.9
300-50_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.66
300-50_Shallow	Rad	Uranium-238	U-238	pCi/g	8.4
300-8_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	574
300-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,374
300-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.79
300-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82
316-1_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	40,572
316-1_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.10
316-1_Overburden	Rad	Cobalt-60	10198-40-0	pCi/g	0.32
316-1_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	13
316-1_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	1.1
316-1_Overburden	Rad	Uranium-238	U-238	pCi/g	13
316-1_Shallow_1	non-Rad	Aroclor-1248	12672-29-6	µg/kg	3,000
316-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	19,014
316-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	69
316-1_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	98
316-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	83,027
316-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.032
316-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.2
316-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	28
316-1_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	1.11E+07
316-1_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	490
316-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	98
316-1_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	5,138
316-1_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	129,106
316-1_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	416
316-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	342
316-1_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	474
316-1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	50,455
316-1_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	9,703
316-1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	1.37E+06
316-1_Shallow_3	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	3.2
316-1_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.44E+07
316-1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	14,409
316-1_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	392,825
316-1_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	1,105
316-1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	94,656
316-1_Shallow_3	non-Rad	Phenol	108-95-2	µg/kg	28
316-1_Shallow_3	non-Rad	Selenium	7782-49-2	µg/kg	1,444
316-1_Shallow_3	non-Rad	Silver	7440-22-4	µg/kg	13,196
316-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	63,074
316-1_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	56,707
316-1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	82,016
316-1_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.37
316-1_Shallow_3	Rad	Cobalt-60	10198-40-0	pCi/g	2.3
316-1_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	23
316-1_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	2.6
316-1_Shallow_3	Rad	Uranium-238	U-238	pCi/g	21
316-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	µg/kg	62

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
316-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	42,963
316-1_Shallow_4	Rad	Cobalt-60	10198-40-0	pCi/g	0.12
316-1_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	16
316-1_Shallow_4	Rad	Uranium-235	15117-96-1	pCi/g	1.1
316-1_Shallow_4	Rad	Uranium-238	U-238	pCi/g	14
316-2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	210,452
316-2_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.031
316-2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.092
316-2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	86
316-2_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	12
316-2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	69
316-2_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	µg/kg	697
316-2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	42
316-2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	110
316-2_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	291,369
316-2_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.45
316-2_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.45
316-2_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	115
316-2_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	11
316-2_Shallow_2	Rad	Uranium-238	U-238	pCi/g	96
316-2_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	8,000
316-2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	260
316-2_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	180
316-2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	73,174
316-2_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.91
316-2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	24
316-5_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,070
316-5_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	38
316-5_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	146
316-5_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	100
316-5_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	271,835
316-5_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.48
316-5_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	2.3
316-5_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	19
316-5_Shallow_1	Rad	Uranium-238	U-238	pCi/g	89
316-5_Shallow_2	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	140
316-5_Shallow_2	non-Rad	2-Butoxyethanol	111-76-2	µg/kg	240
316-5_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,180
316-5_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	76,700
316-5_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	180
316-5_Shallow_2	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	110
316-5_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,900
316-5_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	38
316-5_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	146
316-5_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	3,200
316-5_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	490
316-5_Shallow_2	non-Rad	Silver	7440-22-4	µg/kg	3,600
316-5_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	204,701
316-5_Shallow_2	Rad	Americium-241	14596-10-2	pCi/g	0.12
316-5_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	1.7
316-5_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.12
316-5_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	9.0
316-5_Shallow_2	Rad	Uranium-238	U-238	pCi/g	68
316-5_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	57
316-5_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	70
316-5_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52
316-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,300
316-5_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	190
316-5_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	1,500
316-5_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	138,095
316-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8
316-5_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.072
316-5_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	7.7
316-5_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	45
331 LSLDF_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	25
331 LSLDF_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	590
331 LSLDF_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	0.56
331 LSLDF_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	0.39
331 LSLDF_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.90E+06
331 LSLDF_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	360
331 LSLDF_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	850
331 LSLDF_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400
331 LSLDF_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	78,600
331 LSLDF_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	570
331 LSLDF_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	910
331 LSLDF_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700
331 LSLDF_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	340
331 LSLDF_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	140
331 LSLDF_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,300
331 LSLDF_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,600
331 LSLDF_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,400
331 LSLDF_Shallow_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	13
331 LSLDF_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	98

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	1.9
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan II	33213-65-9	µg/kg	3.1
331 LSLDF_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.20E+07
331 LSLDF_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	9,000
331 LSLDF_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	349,000
331 LSLDF_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	110
331 LSLDF_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	3.3
331 LSLDF_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	11
331 LSLDF_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	590
331 LSLDF_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,000
331 LSLDF_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	41,700
331 LSLDF_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	9,500
331 LSLDF_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,100
331 LSLDF_Shallow_Focused	non-Rad	Uranium	7440-61-1	µg/kg	2,300
331 LSLDF_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,100
331 LSLDF_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000
331 LSLDF_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.54
331 LSLDF_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.47
600-243_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	279
600-243_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	31
600-243_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,300
600-243_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	27
600-243_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	18
600-243_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,159
600-243_Shallow	non-Rad	Barium	7440-39-3	µg/kg	292,072
600-243_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	43
600-243_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	43
600-243_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	46
600-243_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32
600-243_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	2,079
600-243_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	432
600-243_Shallow	non-Rad	Boron	7440-42-8	µg/kg	294,463
600-243_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	793
600-243_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	18,006
600-243_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	63
600-243_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,207
600-243_Shallow	non-Rad	Copper	7440-50-8	µg/kg	53,981
600-243_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	78
600-243_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	37
600-243_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	79
600-243_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	28
600-243_Shallow	non-Rad	Lead	7439-92-1	µg/kg	40,139
600-243_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	208,289
600-243_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,869
600-243_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	204
600-243_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	21,395
600-243_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	70
600-243_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	5,709
600-243_Shallow	non-Rad	Silver	7440-22-4	µg/kg	500
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	95,319
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	334,524
600-243_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,986
600-243_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	84,099
600-259_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.034
600-259_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.068
600-259_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.038
600-47_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,300
600-47_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,000
600-47_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	500
600-47_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	90
600-47_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	5,500
600-47_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,500
600-47_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,303
600-47_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4
600-47_Shallow	Rad	Uranium-238	U-238	pCi/g	1.6
618-1_Deep	non-Rad	Aluminum	7429-90-5	µg/kg	6.37E+06
618-1_Deep	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,760
618-1_Deep	non-Rad	Aroclor-1260	11096-82-5	µg/kg	294
618-1_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	2,550
618-1_Deep	non-Rad	Barium	7440-39-3	µg/kg	299,000
618-1_Deep	non-Rad	Beryllium	7440-41-7	µg/kg	218
618-1_Deep	non-Rad	Boron	7440-42-8	µg/kg	1,360
618-1_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	263
618-1_Deep	non-Rad	Chromium	7440-47-3	µg/kg	7,740
618-1_Deep	non-Rad	Cobalt	7440-48-4	µg/kg	8,600
618-1_Deep	non-Rad	Copper	7440-50-8	µg/kg	46,300
618-1_Deep	non-Rad	Fluoride	16984-48-8	µg/kg	2,800
618-1_Deep	non-Rad	Iron	7439-89-6	µg/kg	2.47E+07
618-1_Deep	non-Rad	Lead	7439-92-1	µg/kg	58,400
618-1_Deep	non-Rad	Lithium	7439-93-2	µg/kg	5,980
618-1_Deep	non-Rad	Manganese	7439-96-5	µg/kg	352,000
618-1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	1,180
618-1_Deep	non-Rad	Molybdenum	7439-98-7	µg/kg	493

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
618-1_Deep	non-Rad	Nickel	7440-02-0	µg/kg	17,600
618-1_Deep	non-Rad	Nitrate	14797-55-8	µg/kg	1,700
618-1_Deep	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	220
618-1_Deep	non-Rad	Uranium	7440-61-1	µg/kg	37,400
618-1_Deep	non-Rad	Vanadium	7440-62-2	µg/kg	73,000
618-1_Deep	non-Rad	Zinc	7440-66-6	µg/kg	134,000
618-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.46
618-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	33
618-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	2.7
618-1_Deep	Rad	Uranium-238	U-238	pCi/g	32
618-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06
618-1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	407
618-1_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1.24E+06
618-1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	99
618-1_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,580
618-1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	1.87E+06
618-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	323
618-1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,620
618-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,030
618-1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,900
618-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,920
618-1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	68,700
618-1_Deep_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	3,300
618-1_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.41E+07
618-1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	333,000
618-1_Deep_Focused	non-Rad	Lithium	7439-93-2	µg/kg	8,450
618-1_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	351,000
618-1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8,940
618-1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,140
618-1_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,700
618-1_Deep_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	11,900
618-1_Deep_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	1,560
618-1_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,290
618-1_Deep_Focused	non-Rad	Uranium	7440-61-1	µg/kg	209,000
618-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	70,900
618-1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	82,000
618-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	6.5
618-1_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	70
618-1_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.5
618-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	65
618-1_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.21E+06
618-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	264
618-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	54
618-1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,280
618-1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	97,200
618-1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	188
618-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,190
618-1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	68
618-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,930
618-1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,360
618-1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,400
618-1_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	400
618-1_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07
618-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,100
618-1_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	6,380
618-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	300,000
618-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	31
618-1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	336
618-1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,150
618-1_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	1,600
618-1_Shallow	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	300
618-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,224
618-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	56,300
618-1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,100
618-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9
618-1_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5
618-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.22E+07
618-1_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	455
618-1_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	35
618-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	981
618-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	56
618-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,090
618-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	102,000
618-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	371
618-1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,740
618-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	266
618-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,500
618-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,600
618-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,800
618-1_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	900
618-1_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.28E+07
618-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,210
618-1_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	13,300

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
618-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	403,000
618-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	198
618-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	356
618-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	16,800
618-1_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	3,800
618-1_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	260
618-1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,120
618-1_Shallow_Focused	non-Rad	Uranium	7440-61-1	µg/kg	7,080
618-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,700
618-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	68,100
618-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11
618-1_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.99
618-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	8.2
618-12_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	8,557
618-12_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	63
618-12_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	60
618-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	32,092
618-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.47
618-12_Shallow	Rad	Uranium-238	U-238	pCi/g	11
618-13_Shallow	non-Rad	Acetone	67-64-1	µg/kg	8.6
618-13_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.34E+06
618-13_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	312
618-13_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,500
618-13_Shallow	non-Rad	Barium	7440-39-3	µg/kg	74,000
618-13_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	212
618-13_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,050
618-13_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	63
618-13_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,700
618-13_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,290
618-13_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,500
618-13_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.01E+07
618-13_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,620
618-13_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	344,000
618-13_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	5.1
618-13_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	420
618-13_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,400
618-13_Shallow	non-Rad	Tin	7440-31-5	µg/kg	1,050
618-13_Shallow	non-Rad	Uranium	7440-61-1	µg/kg	1,750
618-13_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	55,800
618-13_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,400
618-13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.038
618-13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9
618-13_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7
618-13_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	5.9
618-13_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.22E+06
618-13_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	233
618-13_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,390
618-13_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	57,700
618-13_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	184
618-13_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	960
618-13_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	47
618-13_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,740
618-13_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,710
618-13_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,100
618-13_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	150
618-13_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07
618-13_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,940
618-13_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	268,000
618-13_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	5.0
618-13_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	297
618-13_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,000
618-13_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	745
618-13_Shallow_Focused	non-Rad	Uranium	7440-61-1	µg/kg	1,500
618-13_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,600
618-13_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,100
618-13_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.1
618-13_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.96
618-2_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	1,500
618-2_Deep	non-Rad	Barium	7440-39-3	µg/kg	83,300
618-2_Deep	non-Rad	Chromium	7440-47-3	µg/kg	6,700
618-2_Deep	non-Rad	Lead	7439-92-1	µg/kg	6,600
618-2_Deep	non-Rad	Selenium	7782-49-2	µg/kg	780
618-2_Deep	non-Rad	Tin	7440-31-5	µg/kg	2,900
618-2_Deep	non-Rad	Uranium	7440-61-1	µg/kg	501,000
618-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	7.9
618-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1.0
618-2_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	1.5
618-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	91
618-2_Deep	Rad	Plutonium-241	14119-32-5	pCi/g	42
618-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	12
618-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	161
618-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.78
618-2_Deep	Rad	Uranium-238	U-238	pCi/g	165

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration*
618-2_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	6.9
618-2_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300
618-2_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	109,000
618-2_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	27
618-2_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	200
618-2_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400
618-2_Deep_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	18
618-2_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,800
618-2_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,200
618-2_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	600
618-2_Deep_Focused	non-Rad	Tin	7440-31-5	µg/kg	42,500
618-2_Deep_Focused	non-Rad	Uranium	7440-61-1	µg/kg	148,000
618-2_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	9.2
618-2_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.1
618-2_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	1.6
618-2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	92
618-2_Deep_Focused	Rad	Plutonium-241	14119-32-5	pCi/g	33
618-2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2
618-2_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	48
618-2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	2.4
618-2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	50
618-2_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	2,700
618-2_Overburden	non-Rad	Barium	7440-39-3	µg/kg	74,700
618-2_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	6,600
618-2_Overburden	non-Rad	Lead	7439-92-1	µg/kg	4,300
618-2_Overburden	non-Rad	Selenium	7782-49-2	µg/kg	1,000
618-2_Overburden	non-Rad	Tin	7440-31-5	µg/kg	2,700
618-2_Overburden	non-Rad	Uranium	7440-61-1	µg/kg	1,140
618-2_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.058
618-2_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.64
618-2_Overburden	Rad	Uranium-238	U-238	pCi/g	0.59
618-2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	1,900
618-2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	79,100
618-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,100
618-2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,600
618-2_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	760
618-2_Shallow	non-Rad	Tin	7440-31-5	µg/kg	2,400
618-2_Shallow	non-Rad	Uranium	7440-61-1	µg/kg	4,530
618-2_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.81
618-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.2
618-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	7.7
618-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.2
618-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.21
618-2_Shallow	Rad	Uranium-238	U-238	pCi/g	2.2
618-2_Staging Pile	non-Rad	Arsenic	7440-38-2	µg/kg	3,063
618-2_Staging Pile	non-Rad	Barium	7440-39-3	µg/kg	67,690
618-2_Staging Pile	non-Rad	Chromium	7440-47-3	µg/kg	6,424
618-2_Staging Pile	non-Rad	Lead	7439-92-1	µg/kg	4,011
618-2_Staging Pile	non-Rad	Uranium	7440-61-1	µg/kg	5,022
618-2_Staging Pile	Rad	Americium-241	14596-10-2	pCi/g	0.82
618-2_Staging Pile	Rad	Cesium-137	10045-97-3	pCi/g	0.095
618-2_Staging Pile	Rad	Plutonium-239/240	PU-239/240	pCi/g	10
618-2_Staging Pile	Rad	Tritium	10028-17-8	pCi/g	2.3
618-2_Staging Pile	Rad	Uranium-233/234	U-233/234	pCi/g	2.0
618-2_Staging Pile	Rad	Uranium-235	15117-96-1	pCi/g	0.12
618-2_Staging Pile	Rad	Uranium-238	U-238	pCi/g	2.0
618-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,800
618-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	76,500
618-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,700
618-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,900
618-3_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	659
618-3_Shallow	non-Rad	Uranium	7440-61-1	µg/kg	1,610
618-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.68
618-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75
618-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	238,577
618-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	80
618-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.8
618-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	79
618-4_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	2,200
618-4_Deep	non-Rad	Lead	7439-92-1	µg/kg	20,000
618-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	64,506
618-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	20
618-4_Deep	Rad	Uranium-235	15117-96-1	pCi/g	1.1
618-4_Deep	Rad	Uranium-238	U-238	pCi/g	22
618-4_Deep_Focused	non-Rad	2-Butanone	78-93-3	µg/kg	130
618-4_Deep_Focused	non-Rad	Acetone	67-64-1	µg/kg	16
618-4_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,600
618-4_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700
618-4_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	104,000
618-4_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	4,700
618-4_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,500
618-4_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	27,700
618-4_Deep_Focused	non-Rad	Diethyl ether	60-29-7	µg/kg	1.0

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
618-4_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,900
618-4_Deep_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	40
618-4_Deep_Focused	non-Rad	Phenol	108-95-2	µg/kg	110
618-4_Deep_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	24
618-4_Deep_Focused	non-Rad	Toluene	108-88-3	µg/kg	4.8
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,000
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	µg/kg	42,000
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	65
618-4_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	20,777
618-4_Deep_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0
618-4_Deep_Focused	non-Rad	Trichloromonofluoromethane	75-69-4	µg/kg	12
618-4_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	7.2
618-4_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.51
618-4_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	6.9
618-4_Overburden_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,500
618-4_Overburden_2	non-Rad	Lead	7439-92-1	µg/kg	4,700
618-4_Overburden_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,197
618-4_Overburden_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3
618-4_Overburden_2	Rad	Uranium-238	U-238	pCi/g	1.4
618-4_Overburden_3	non-Rad	Lead	7439-92-1	µg/kg	5,000
618-4_Overburden_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,171
618-4_Overburden_3	Rad	Uranium-233/234	U-233/234	pCi/g	0.42
618-4_Overburden_3	Rad	Uranium-235	15117-96-1	pCi/g	0.032
618-4_Overburden_3	Rad	Uranium-238	U-238	pCi/g	0.44
618-4_Overburden_4	non-Rad	Lead	7439-92-1	µg/kg	4,800
618-4_Overburden_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,323
618-4_Overburden_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.94
618-4_Overburden_4	Rad	Uranium-238	U-238	pCi/g	0.94
618-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,200
618-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	49,000
618-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	7,456
618-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	3.2
618-4_Shallow	Rad	Uranium-238	U-238	pCi/g	3.1
618-5_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	5,200
618-5_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	470
618-5_Deep	non-Rad	Chromium	7440-47-3	µg/kg	14,700
618-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	82,300
618-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	26,618
618-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	8.6
618-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.46
618-5_Deep	Rad	Uranium-238	U-238	pCi/g	8.9
618-5_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.65E+06
618-5_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,800
618-5_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,500
618-5_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	106,000
618-5_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	672
618-5_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,500
618-5_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,500
618-5_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,400
618-5_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.02E+07
618-5_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,600
618-5_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	579,000
618-5_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	33
618-5_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,300
618-5_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,270
618-5_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	36,540
618-5_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	79,500
618-5_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	65,800
618-5_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11
618-5_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.48
618-5_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	12
618-5_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,400
618-5_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	170
618-5_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	9,700
618-5_Overburden	non-Rad	Lead	7439-92-1	µg/kg	7,500
618-5_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	9,773
618-5_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	4.1
618-5_Overburden	Rad	Uranium-238	U-238	pCi/g	4.6
618-5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,300
618-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,300
618-5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,100
618-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,849
618-5_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.94
618-5_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1
618-5_Staging Pile_4	non-Rad	Arsenic	7440-38-2	µg/kg	3,300
618-5_Staging Pile_4	non-Rad	Cadmium	7440-43-9	µg/kg	50
618-5_Staging Pile_4	non-Rad	Chromium	7440-47-3	µg/kg	11,800
618-5_Staging Pile_4	non-Rad	Lead	7439-92-1	µg/kg	5,300
618-5_Staging Pile_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,364
618-5_Staging Pile_4	Rad	Uranium-233/234	U-233/234	pCi/g	1.2
618-5_Staging Pile_4	Rad	Uranium-238	U-238	pCi/g	1.1
618-5_Staging Pile_5	non-Rad	Arsenic	7440-38-2	µg/kg	2,700
618-5_Staging Pile_5	non-Rad	Chromium	7440-47-3	µg/kg	10,300

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
618-5_Staging Pile_5	non-Rad	Lead	7439-92-1	µg/kg	3,900
618-5_Staging Pile_5	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,326
618-5_Staging Pile_5	Rad	Uranium-233/234	U-233/234	pCi/g	1.5
618-5_Staging Pile_5	Rad	Uranium-235	15117-96-1	pCi/g	0.17
618-5_Staging Pile_5	Rad	Uranium-238	U-238	pCi/g	1.7
618-7_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.25E+06
618-7_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	560
618-7_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	1,891
618-7_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	68,874
618-7_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	278
618-7_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	65
618-7_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	10,227
618-7_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	9,152
618-7_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	16,120
618-7_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07
618-7_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	14,567
618-7_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	326,067
618-7_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	44
618-7_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	20,977
618-7_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,547
618-7_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	10,814
618-7_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	74,576
618-7_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	49,177
618-7_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.067
618-7_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	3.6
618-7_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.36
618-7_Shallow_1	Rad	Uranium-238	U-238	pCi/g	3.6
618-7_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	4.97E+06
618-7_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	660
618-7_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,500
618-7_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	73,800
618-7_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	440
618-7_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,800
618-7_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	9,300
618-7_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,600
618-7_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07
618-7_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	2,800
618-7_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	364,000
618-7_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	20
618-7_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	9,700
618-7_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,500
618-7_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,574
618-7_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	74,700
618-7_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	46,200
618-7_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	0.57
618-7_Shallow_2	Rad	Uranium-238	U-238	pCi/g	0.53
618-7_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	6.74E+06
618-7_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	450
618-7_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	2,800
618-7_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	82,500
618-7_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	310
618-7_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	190
618-7_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	10,100
618-7_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	8,600
618-7_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	13,600
618-7_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.43E+07
618-7_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	4,300
618-7_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	357,000
618-7_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	20
618-7_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	10,100
618-7_Shallow_3	non-Rad	Tin	7440-31-5	µg/kg	1,800
618-7_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,852
618-7_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	68,200
618-7_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	44,500
618-7_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	1.1
618-7_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.085
618-7_Shallow_3	Rad	Uranium-238	U-238	pCi/g	0.95
618-7_Shallow_4	non-Rad	Aluminum	7429-90-5	µg/kg	5.65E+06
618-7_Shallow_4	non-Rad	Antimony	7440-36-0	µg/kg	250
618-7_Shallow_4	non-Rad	Arsenic	7440-38-2	µg/kg	5,200
618-7_Shallow_4	non-Rad	Barium	7440-39-3	µg/kg	57,900
618-7_Shallow_4	non-Rad	Beryllium	7440-41-7	µg/kg	220
618-7_Shallow_4	non-Rad	Cadmium	7440-43-9	µg/kg	90
618-7_Shallow_4	non-Rad	Chromium	7440-47-3	µg/kg	11,400
618-7_Shallow_4	non-Rad	Cobalt	7440-48-4	µg/kg	6,700
618-7_Shallow_4	non-Rad	Copper	7440-50-8	µg/kg	13,200
618-7_Shallow_4	non-Rad	Iron	7439-89-6	µg/kg	2.12E+07
618-7_Shallow_4	non-Rad	Lead	7439-92-1	µg/kg	3,000
618-7_Shallow_4	non-Rad	Manganese	7439-96-5	µg/kg	285,000
618-7_Shallow_4	non-Rad	Nickel	7440-02-0	µg/kg	12,900
618-7_Shallow_4	non-Rad	Tin	7440-31-5	µg/kg	710
618-7_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,064
618-7_Shallow_4	non-Rad	Vanadium	7440-62-2	µg/kg	54,800

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
618-7_Shallow_4	non-Rad	Zinc	7440-66-6	µg/kg	37,000
618-7_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.69
618-7_Shallow_4	Rad	Uranium-238	U-238	pCi/g	0.76
618-7_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	150
618-7_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.61E+06
618-7_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	980
618-7_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	6.7
618-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,200
618-7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	92,800
618-7_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	88
618-7_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	66
618-7_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	52
618-7_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	11
618-7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	370
618-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	470
618-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	6,200
618-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	65,900
618-7_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	69
618-7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,000
618-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	25,000
618-7_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	45
618-7_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	33
618-7_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	48
618-7_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.87E+07
618-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,500
618-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	425,000
618-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20
618-7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	17,200
618-7_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	410
618-7_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,200
618-7_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	680,000
618-7_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	19,563
618-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	80,500
618-7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,400
618-7_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.010
618-7_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11
618-7_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.97
618-7_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	6.4
618-8_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,100
618-8_Shallow	non-Rad	Barium	7440-39-3	µg/kg	97,600
618-8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,400
618-8_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,100
618-8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	846
618-8_Shallow	non-Rad	Uranium	7440-61-1	µg/kg	1,720
618-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.2
618-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.73
618-9_Shallow_Focused	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	110
618-9_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	680
618-9_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	390
618-9_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06
618-9_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	µg/kg	1,900
618-9_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	µg/kg	1,900
618-9_Shallow_Focused	non-Rad	Aroclor-1232	11141-16-5	µg/kg	1,900
618-9_Shallow_Focused	non-Rad	Aroclor-1242	53469-21-9	µg/kg	1,900
618-9_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,900
618-9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,900
618-9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,900
618-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	11,600
618-9_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,200
618-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	330
618-9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	5,200
618-9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	2,700
618-9_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	69
618-9_Shallow_Focused	non-Rad	Chloroform	67-66-3	µg/kg	9.0
618-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,700
618-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,400
618-9_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,700
618-9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	7,200
618-9_Shallow_Focused	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	44
618-9_Shallow_Focused	non-Rad	Hexachlorobutadiene	87-68-3	µg/kg	760
618-9_Shallow_Focused	non-Rad	Hexachloroethane	67-72-1	µg/kg	17,000
618-9_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.49E+07
618-9_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,700
618-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	359,000
618-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	330
618-9_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2,300
618-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600
618-9_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	1.67E+06
618-9_Shallow_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	920
618-9_Shallow_Focused	non-Rad	Toluene	108-88-3	µg/kg	9.0
618-9_Shallow_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0
618-9_Shallow_Focused	non-Rad	Uranium	7440-61-1	µg/kg	3,100
618-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,300

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
618-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,300
618-9_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.071
618-9_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	3.0
628-4_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,374
628-4_Overburden	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	61
628-4_Overburden	non-Rad	Lead	7439-92-1	µg/kg	7,284
628-4_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,308
628-4_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.033
628-4_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.87
628-4_Overburden	Rad	Uranium-238	U-238	pCi/g	0.78
628-4_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	42
628-4_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,115
628-4_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	243
628-4_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	38
628-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,864
628-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	99,167
628-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,163
628-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.1
628-4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.11
628-4_Shallow	Rad	Uranium-238	U-238	pCi/g	1.0
UPR-300-17_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	117
UPR-300-17_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.34E+06
UPR-300-17_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	7.0
UPR-300-17_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	359
UPR-300-17_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,970
UPR-300-17_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	450
UPR-300-17_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	113
UPR-300-17_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,573
UPR-300-17_Shallow	non-Rad	Barium	7440-39-3	µg/kg	81,014
UPR-300-17_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	59
UPR-300-17_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	44
UPR-300-17_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	33
UPR-300-17_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	9.9
UPR-300-17_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	240
UPR-300-17_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,903
UPR-300-17_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	173
UPR-300-17_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,795
UPR-300-17_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	39
UPR-300-17_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,688
UPR-300-17_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,135
UPR-300-17_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	35
UPR-300-17_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.9
UPR-300-17_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	5.9
UPR-300-17_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.90E+07
UPR-300-17_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,240
UPR-300-17_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,159
UPR-300-17_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	69
UPR-300-17_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	412
UPR-300-17_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	48
UPR-300-17_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	563,654
UPR-300-17_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	34
UPR-300-17_Shallow	non-Rad	Silver	7440-22-4	µg/kg	340
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,950
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	210,420
UPR-300-17_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,420
UPR-300-17_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	52,150
UPR-300-17_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	157,172
UPR-300-17_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	6.1
UPR-300-17_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.91
UPR-300-17_Shallow	Rad	Uranium-238	U-238	pCi/g	4.0
UPR-300-46_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	13
UPR-300-46_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.80E+06
UPR-300-46_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	381
UPR-300-46_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	879
UPR-300-46_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	490
UPR-300-46_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	84
UPR-300-46_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,846
UPR-300-46_Shallow	non-Rad	Barium	7440-39-3	µg/kg	82,137
UPR-300-46_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.9
UPR-300-46_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.4
UPR-300-46_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.4
UPR-300-46_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.8
UPR-300-46_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	222
UPR-300-46_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,714
UPR-300-46_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	95
UPR-300-46_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,173
UPR-300-46_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	5.6
UPR-300-46_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,361
UPR-300-46_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,151
UPR-300-46_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.3
UPR-300-46_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	9.6
UPR-300-46_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.2
UPR-300-46_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	7.6

Table 4-6. Exposure Point Concentrations for Each Waste Site Decision Unit in the 300 Area Source Operable Unit

Waste Site Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration[a]
UPR-300-46_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07
UPR-300-46_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,105
UPR-300-46_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	311,001
UPR-300-46_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	29
UPR-300-46_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	456
UPR-300-46_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	36
UPR-300-46_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,230
UPR-300-46_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	4.4
UPR-300-46_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,897
UPR-300-46_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	53,808
UPR-300-46_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	47,945
UPR-300-46_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.070
UPR-300-46_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.8
UPR-300-46_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24
UPR-300-46_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7

Notes:

a. ECF-300NPL-11-0137, *Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit.*

Table 4-7. Hanford Site Soil Background Values

Analyte Name	Analyte Class	Units	Lognormal 90th Percentile Background Value	Source of Background Values
Aluminum	METAL	µg/kg	1.18E+07	DOE/RL-92-24, V.1, Rev.4
Ammonia	ANIONS	µg/kg	9,230	DOE/RL-92-24, V.1, Rev.4
Antimony	METAL	µg/kg	130	ECF-HANFORD-11-0038
Arsenic	METAL	µg/kg	6,470	DOE/RL-92-24, V.1, Rev.4
Barium	METAL	µg/kg	132,000	DOE/RL-92-24, V.1, Rev.4
Beryllium	METAL	µg/kg	1,510	DOE/RL-92-24, V.1, Rev.4
Boron	METAL	µg/kg	3,890	ECF-HANFORD-11-0038
Cadmium	METAL	µg/kg	563	ECF-HANFORD-11-0038
Calcium	METAL	µg/kg	1.72E+07	DOE/RL-92-24, V.1, Rev.4
Cesium-137	RAD	pCi/g	1.1	DOE/RL-96-12, Rev.0
Chloride	ANIONS	µg/kg	100,000	DOE/RL-92-24, V.1, Rev.4
Chromium	METAL	µg/kg	18,500	DOE/RL-92-24, V.1, Rev.4
Cobalt	METAL	µg/kg	15,700	DOE/RL-92-24, V.1, Rev.4
Cobalt-60	RAD	pCi/g	0.0084	DOE/RL-96-12, Rev.0
Copper	METAL	µg/kg	22,000	DOE/RL-92-24, V.1, Rev.4
Europium-154	RAD	pCi/g	0.033	DOE/RL-96-12, Rev.0
Europium-155	RAD	pCi/g	0.054	DOE/RL-96-12, Rev.0
Fluoride	ANIONS	µg/kg	2,810	DOE/RL-92-24, V.1, Rev.4
Gross beta	RAD	pCi/g	23	DOE/RL-96-12, Rev.0
Iron	METAL	µg/kg	3.26E+07	DOE/RL-92-24, V.1, Rev.4
Lead	METAL	µg/kg	10,200	DOE/RL-92-24, V.1, Rev.4
Lithium	METAL	µg/kg	13300	ECF-HANFORD-11-0038
Magnesium	METAL	µg/kg	7.06E+06	DOE/RL-92-24, V.1, Rev.4
Manganese	METAL	µg/kg	512,000	DOE/RL-92-24, V.1, Rev.4
Mercury	METAL	µg/kg	13	ECF-HANFORD-11-0038
Molybdenum	METAL	µg/kg	470	ECF-HANFORD-11-0038
Nickel	METAL	µg/kg	19,100	DOE/RL-92-24, V.1, Rev.4
Nitrate	ANIONS	µg/kg	52,000	DOE/RL-92-24, V.1, Rev.4
Phosphate	ANIONS	µg/kg	785	DOE/RL-92-24, V.1, Rev.4
Plutonium-238	RAD	pCi/g	0.0038	DOE/RL-96-12, Rev.0
Plutonium-239/240	RAD	pCi/g	0.025	DOE/RL-96-12, Rev.0
Potassium	METAL	µg/kg	2.15E+06	DOE/RL-92-24, V.1, Rev.4
Potassium-40	RAD	pCi/g	17	DOE/RL-96-12, Rev.0
Radium-226	RAD	pCi/g	0.82	DOE/RL-96-12, Rev.0
Radium-228	RAD	pCi/g	1.82	DOE/RL-96-12, Rev.0
Selenium	METAL	µg/kg	780	ECF-HANFORD-11-0038
Silver	METAL	µg/kg	167	ECF-HANFORD-11-0038
Sodium	METAL	µg/kg	690,000	DOE/RL-92-24, V.1, Rev.4
Strontium-90	RAD	pCi/g	0.18	DOE/RL-96-12, Rev.0
Sulfate	ANIONS	µg/kg	237,000	DOE/RL-92-24, V.1, Rev.4
Thallium	METAL	µg/kg	185	ECF-HANFORD-11-0038
Thorium-228	RAD	pCi/g	1.40	DOE/RL-96-12, Rev.0
Thorium-232	RAD	pCi/g	1.3	DOE/RL-96-12, Rev.0
Total beta radiostrontium	RAD	pCi/g	0.18	DOE/RL-96-12, Rev.0
Total_U_Isotopes	METAL	µg/kg	3,210	Isotopic Activity Conversion based on DOE/RL-96-12 values
Uranium	METAL	µg/kg	3,210	Isotopic Activity Conversion based on DOE/RL-96-12 values
Uranium-233/234	RAD	pCi/g	1.1	DOE/RL-96-12, Rev.0
Uranium-234	RAD	pCi/g	1.1	DOE/RL-96-12, Rev.0
Uranium-235	RAD	pCi/g	0.11	DOE/RL-96-12, Rev.0
Uranium-238	RAD	pCi/g	1.1	DOE/RL-96-12, Rev.0
Vanadium	METAL	µg/kg	85,100	DOE/RL-92-24, V.1, Rev.4
Zinc	METAL	µg/kg	67,800	DOE/RL-92-24, V.1, Rev.4

Notes:

DOE/RL-92-24, *Hanford Site Background: Part 1, Soil Background for Nonradioactive Analytes.*

DOE/RL-96-12, *Hanford Site Background: Part 2, Soil Background for Radionuclides.*

ECF-HANFORD-11-0038, *Soil Background Data for Interim Use at the Hanford Site.*

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a]	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
300 ASH PITS_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	52	91,112	50.0	1,822	1.65E-02	1,822	Scaled GWP SSL	No [h]
300 ASH PITS_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,078	20,000[f]	50.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300 ASH PITS_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	96	--[b]	50.0	--	3.30E-01	--	Scaled GWP SSL	--
300 ASH PITS_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	76	8.41E+06	50.0	168,187	3.30E-01	168,187	Scaled GWP SSL	No
300 ASH PITS_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,450	101,630[c]	50.0	101,630	---	101,630	Scaled GWP SSL	No
300 ASH PITS_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.039	--[d]	50.0	--	5.00E-01	--	Scaled GWP SSL	--
300 ASH PITS_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82	--[d]	50.0	--	1.00E+00	--	Scaled GWP SSL	--
300 VTS_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.029	--[b]	24.7	--	1.00E-01	--	Scaled GWP SSL	--
300-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	13,500	20,000[f]	38.6	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	200	--[b]	38.6	--	3.30E-01	--	Scaled GWP SSL	--
300-10_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	230	8.41E+06	38.6	217,859	3.30E-01	217,859	Scaled GWP SSL	No
300-10_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,078	101,630[c]	38.6	101,630	---	101,630	Scaled GWP SSL	No
300-10_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16	--[b]	38.6	--	1.00E-01	--	Scaled GWP SSL	--
300-10_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.041	--[d]	38.6	--	5.00E-01	--	Scaled GWP SSL	--
300-10_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	--[d]	38.6	--	1.00E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.62E+06	--[b]	1.0	--	5.00E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	122	--[b]	1.0	--	1.65E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	40	--[b]	1.0	--	1.65E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,420	20,000[f]	1.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-109_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	63,300	--[b]	1.0	--	5.00E-01	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.2	--[b]	1.0	--	1.50E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.3	--[b]	1.0	--	1.50E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	180	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	632	1.08E+08	1.0	107,841,582	2.00E+00	107,841,582	Scaled GWP SSL	No
300-109_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	59	3.52E+06	1.0	3,521,315	2.00E-01	3,521,315	Scaled GWP SSL	No
300-109_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,950	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.8	--[b]	1.0	--	1.00E-01	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,420	--[b]	1.0	--	5.00E-03	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,800	2.41E+08	1.0	241,498,892	1.00E+00	241,498,892	Scaled GWP SSL	No
300-109_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	14	--[b]	1.0	--	3.00E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.75E+07	--[b]	1.0	--	5.00E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	2,890	1.06E+07	1.0	10,563,946	5.00E-01	10,563,946	Scaled GWP SSL	No [h]
300-109_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	278,000	--[b]	1.0	--	2.50E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	22	1.41E+06	1.0	1,408,526	2.50E+00	1,408,526	Scaled GWP SSL	No [h]
300-109_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	341	2.58E+07	1.0	25,827,075	2.00E+00	25,827,075	Scaled GWP SSL	No
300-109_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,490	--[b]	1.0	--	4.00E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1.6	--[b]	1.0	--	5.00E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,108	101,630[c]	1.0	101,630	---	101,630	Scaled GWP SSL	No
300-109_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,600	--[b]	1.0	--	2.50E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,700	--[b]	1.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-109_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	1.0	--	---	--	Scaled GWP SSL	--
300-109_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	--[d]	1.0	--	1.00E+00	--	Scaled GWP SSL	--
300-18_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	20,000[f]	13.5	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-18_Shallow	non-Rad	Barium	7440-39-3	µg/kg	63,400	--[b]	13.5	--	5.00E-01	--	Scaled GWP SSL	--
300-18_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	650	--[b]	13.5	--	2.00E-01	--	Scaled GWP SSL	--
300-18_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	40	3.52E+06	13.5	260,838	2.00E-01	260,838	Scaled GWP SSL	No
300-18_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	6,900	--[b]	13.5	--	2.00E-01	--	Scaled GWP SSL	--
300-18_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,600	1.06E+07	13.5	782,515	5.00E-01	782,515	Scaled GWP SSL	No [h]
300-18_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,136	101,630[c]	13.5	101,630	---	101,630	Scaled GWP SSL	No
300-18_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.65	--[d]	13.5	--	---	--	Scaled GWP SSL	--
300-18_Shallow	Rad	Uranium-238	U-238	pCi/g	0.41	--[d]	13.5	--	1.00E+00	--	Scaled GWP SSL	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	120,000	2.00E+06[e]	1.0	2,000,000	---	2,000,000	Scaled GWP SSL	No
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high bo	TPH/OILH	µg/kg	230,000	2.00E+06[e]	1.0	2,000,000	---	2,000,000	Scaled GWP SSL	No
300-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high bo	TPH/OILH	µg/kg	52,000	2.00E+06[e]	5.0	2,000,000	---	2,000,000	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	5.99E+06	--[b]	58.3	--	5.00E+00	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	322	270,034	58.3	4,632	6.00E-01	4,632	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,096	20,000[f]	58.3	20,000	1.00E+00	20,000	Scaled GWP SSL	No

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot \frac{1 \cdot 10^{-3}}{m \cdot L/g} \cdot \frac{1 \cdot 10^{-3}}{L} \cdot \frac{1 \cdot 10^{-3}}{m^3}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
300-259_Shallow	non-Rad	Barium	7440-39-3	µg/kg	75,232	--[b]	58.3	--	5.00E-01	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	226	--[b]	58.3	--	2.00E-01	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,303	1.08E+08	58.3	1,849,770	2.00E+00	1,849,770	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	252	3.52E+06	58.3	60,400	2.00E-01	60,400	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,901	--[b]	58.3	--	2.00E-01	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,831	--[b]	58.3	--	5.00E-03	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Copper	7440-50-8	µg/kg	10,692	2.41E+08	58.3	4,142,348	1.00E+00	4,142,348	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07	--[b]	58.3	--	5.00E+00	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,625	1.06E+07	58.3	181,200	5.00E-01	181,200	Scaled GWP SSL	No [h]
300-259_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	318,874	--[b]	58.3	--	2.50E+00	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	10	1.41E+06	58.3	24,160	2.50E+00	24,160	Scaled GWP SSL	No [h]
300-259_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	303	2.58E+07	58.3	443,003	2.00E+00	443,003	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,751	--[b]	58.3	--	4.00E+00	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,876	101,630[f]	58.3	101,630	---	101,630	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,626	--[b]	58.3	--	2.50E+00	--	Scaled GWP SSL	--
300-259_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	479,584	--[b]	58.3	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-259_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.6	--[d]	58.3	--	---	--	Scaled GWP SSL	--
300-259_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	--[d]	58.3	--	1.00E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.17E+06	--[b]	33.0	--	5.00E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	922	270,034	33.0	8,183	6.00E-01	8,183	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,160	20,000[g]	33.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	122,000	--[b]	33.0	--	5.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	239	--[b]	33.0	--	2.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,360	1.08E+08	33.0	3,267,927	2.00E+00	3,267,927	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	110	3.52E+06	33.0	106,707	2.00E-01	106,707	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,890	--[b]	33.0	--	2.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,430	--[b]	33.0	--	5.00E-03	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	73,300	2.41E+08	33.0	7,318,148	1.00E+00	7,318,148	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.04E+07	--[b]	33.0	--	5.00E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	18,300	1.06E+07	33.0	320,120	5.00E-01	320,120	Scaled GWP SSL	No [h]
300-260_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	328,000	--[b]	33.0	--	2.50E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	12	1.41E+06	33.0	42,683	2.50E+00	42,683	Scaled GWP SSL	No [h]
300-260_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	537	2.58E+07	33.0	782,639	2.00E+00	782,639	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	--[b]	33.0	--	4.00E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	206	--[b]	33.0	--	2.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,800	101,630[f]	33.0	101,630	---	101,630	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,000	--[b]	33.0	--	2.50E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	77,400	--[b]	33.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-260_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.25	--[d]	33.0	--	5.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	4.3	--[d]	33.0	--	1.00E+00	--	Scaled GWP SSL	--
300-272_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	43,100	2.00E+06[e]	1.0	2,000,000	---	2,000,000	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	960	3.69E+07	43.0	857,712	1.00E-01	857,712	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.61E+06	--[b]	43.0	--	5.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	260	270,034	43.0	6,280	6.00E-01	6,280	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	2,211	20,000[g]	43.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	75,261	--[b]	43.0	--	5.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.3	--[b]	43.0	--	1.50E-02	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.9	--[b]	43.0	--	1.50E-02	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	452	--[b]	43.0	--	2.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,466	1.08E+08	43.0	2,507,944	2.00E+00	2,507,944	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	83	3.52E+06	43.0	81,891	2.00E-01	81,891	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,022	--[b]	43.0	--	2.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	2.2	--[b]	43.0	--	1.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	5,847	--[b]	43.0	--	5.00E-03	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	42,923	2.41E+08	43.0	5,616,253	1.00E+00	5,616,253	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	2,300	--[b]	43.0	--	5.00E-02	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	81	3.08E+07	43.0	717,171	3.00E-02	717,171	Scaled GWP SSL	No

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pCi}{kg} \cdot \frac{10^{12}\,pCi}{1\,Ci} \cdot \frac{1\,Ci}{Bq}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
300-275_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07	--[b]	43.0	--	5.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	7,189	1.06E+07	43.0	245,673	5.00E-01	245,673	Scaled GWP SSL	No [h]
300-275_Shallow_1	non-Rad	Lithium	7439-93-2	µg/kg	6,686	--[b]	43.0	--	2.50E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	276,815	--[b]	43.0	--	2.50E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	17	1.41E+06	43.0	32,756	2.50E+00	32,756	Scaled GWP SSL	No [h]
300-275_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	378	2.58E+07	43.0	600,630	2.00E+00	600,630	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	9,461	--[b]	43.0	--	4.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Silver	7440-22-4	µg/kg	121	--[b]	43.0	--	2.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Strontium	7440-24-6	µg/kg	20,196	--[b]	43.0	--	1.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,483	--[b]	43.0	--	1.00E+01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,251	101,630[i]	43.0	101,630	--	101,630	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	45,128	--[b]	43.0	--	2.50E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	41,014	--[b]	43.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-275_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.046	--[b]	43.0	--	1.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	7.7	--[d]	43.0	--	--	--	Scaled GWP SSL	--
300-275_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.0	--[d]	43.0	--	5.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	Rad	Uranium-238	U-238	pCi/g	7.4	--[d]	43.0	--	1.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	3.6	3.69E+07	7.9	4,668,561	1.00E-01	4,668,561	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	6.24E+06	--[b]	7.9	--	5.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,761	20,000[j]	7.9	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	68,607	--[b]	7.9	--	5.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	254	--[b]	7.9	--	2.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	1,147	1.08E+08	7.9	13,650,833	2.00E+00	13,650,833	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	144	3.52E+06	7.9	445,736	2.00E-01	445,736	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	8,994	--[b]	7.9	--	2.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	5,977	--[b]	7.9	--	5.00E-03	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	11,596	2.41E+08	7.9	30,569,480	1.00E+00	30,569,480	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	56	--[b]	7.9	--	5.00E-02	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	2.6	3.08E+07	7.9	3,903,591	3.00E-02	3,903,591	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07	--[b]	7.9	--	5.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	4,099	1.06E+07	7.9	1,337,208	5.00E-01	1,337,208	Scaled GWP SSL	No [h]
300-275_Shallow_2	non-Rad	Lithium	7439-93-2	µg/kg	7,067	--[b]	7.9	--	2.50E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	292,731	--[b]	7.9	--	2.50E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	28	1.41E+06	7.9	178,294	2.50E+00	178,294	Scaled GWP SSL	No [h]
300-275_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	404	2.58E+07	7.9	3,269,250	2.00E+00	3,269,250	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	9,593	--[b]	7.9	--	4.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	27,081	--[b]	7.9	--	1.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,149	--[b]	7.9	--	1.00E+01	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,725	101,630[i]	7.9	101,630	--	101,630	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	51,632	--[b]	7.9	--	2.50E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	41,245	--[b]	7.9	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-275_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[d]	7.9	--	--	--	Scaled GWP SSL	--
300-275_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	7.9	--	5.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_2	Rad	Uranium-238	U-238	pCi/g	1.2	--[d]	7.9	--	1.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.32E+06	--[b]	117.4	--	5.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1016	12674-11-2	µg/kg	10	--[b]	117.4	--	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	16	97,738	117.4	833	1.65E-02	833	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	190	91,112	117.4	776	1.65E-02	776	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	84	--[b]	117.4	--	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	--[b]	117.4	--	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,638	20,000[j]	117.4	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Barium	7440-39-3	µg/kg	72,411	--[b]	117.4	--	5.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	256	--[b]	117.4	--	2.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,484	1.08E+08	117.4	918,582	2.00E+00	918,582	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	228	8.41E+06	117.4	71,630	3.30E-01	71,630	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	94	3.52E+06	117.4	29,994	2.00E-01	29,994	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,781	--[b]	117.4	--	2.00E-01	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{mg}{kg}\ \text{or}\ \frac{pCi}{g}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
300-33, 300-41, 300-256_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,273	--[b]	117.4	--	5.00E-03	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,662	2.41E+08	117.4	2,057,060	1.00E+00	2,057,060	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	1,651	--[b]	117.4	--	5.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.00E+07	--[b]	117.4	--	5.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,268	1.06E+07	117.4	89,983	5.00E-01	89,983	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	5,495	--[b]	117.4	--	2.50E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	314,762	--[b]	117.4	--	2.50E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	16	1.41E+06	117.4	11,998	2.50E+00	11,998	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	2.9	2,098	117.4	18	5.00E-03	18	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	486	2.58E+07	117.4	219,992	2.00E+00	219,992	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,880	--[b]	117.4	--	4.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	8,617	1.36E+07	117.4	115,988	2.50E+00	115,988	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Silver	7440-22-4	µg/kg	782	--[b]	117.4	--	2.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,349	101,630[f]	117.4	101,630	---	101,630	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	52,694	--[b]	117.4	--	2.50E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,462	--[b]	117.4	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-33, 300-41, 300-256_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.1	--[d]	117.4	--	---	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.34	--[d]	117.4	--	5.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-238	U-238	pCi/g	2.1	--[d]	117.4	--	1.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.51E+06	--[b]	68.5	--	5.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	330	91,112	68.5	1,330	1.65E-02	1,330	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	385	--[b]	68.5	--	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[b]	68.5	--	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,240	20,000[g]	68.5	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	64,600	--[b]	68.5	--	5.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	169	--[b]	68.5	--	2.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,030	1.08E+08	68.5	1,574,330	2.00E+00	1,574,330	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	100	3.52E+06	68.5	51,406	2.00E-01	51,406	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,080	--[b]	68.5	--	2.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,640	--[b]	68.5	--	5.00E-03	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,400	2.41E+08	68.5	3,525,531	1.00E+00	3,525,531	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	1,300	--[b]	68.5	--	5.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.86E+07	--[b]	68.5	--	5.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,160	1.06E+07	68.5	154,218	5.00E-01	154,218	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	6,580	--[b]	68.5	--	2.50E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	259,000	--[b]	68.5	--	2.50E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2	2,098	68.5	31	5.00E-03	31	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	275	2.58E+07	68.5	377,038	2.00E+00	377,038	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,040	--[b]	68.5	--	4.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	17,900	1.36E+07	68.5	198,788	2.50E+00	198,788	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,460	101,630[f]	68.5	101,630	---	101,630	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	51,400	--[b]	68.5	--	2.50E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	38,900	--[b]	68.5	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	3.0	--[d]	68.5	--	---	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	2.2	--[d]	68.5	--	1.00E+00	--	Scaled GWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	100	--[b]	1.0	--	1.65E-02	--	Scaled GWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,200	--[b]	1.0	--	1.65E-02	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.71E+06	--[b]	1.0	--	5.00E+00	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	4,100	270,034	1.0	270,034	6.00E-01	270,034	Scaled GWP SSL	No
300-44_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	16,900	20,000[g]	1.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-44_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	75,200	--[b]	1.0	--	5.00E-01	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	480	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,300	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,200	--[b]	1.0	--	5.00E-03	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	7,800	2.41E+08	1.0	241,498,892	1.00E+00	241,498,892	Scaled GWP SSL	No
300-44_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.94E+07	--[b]	1.0	--	5.00E+00	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	303,000	--[b]	1.0	--	2.50E+00	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\frac{DF}{K_{d}}\times\frac{1}{\rho_{b}}\times\frac{1}{\theta_{w}}\times\frac{1}{\theta_{a}}\times\frac{1}{H'}}{\frac{1}{K_{d}}}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
300-44_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,600	--[h]	1.0	--	4.00E+00	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	872	101,630[i]	1.0	101,630	---	101,630	Scaled GWP SSL	No
300-44_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,200	--[h]	1.0	--	2.50E+00	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,800	--[h]	1.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-44_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.29	--[d]	1.0	--	1.00E+00	--	Scaled GWP SSL	--
300-45_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	86	--[h]	5.0	--	1.65E-02	--	Scaled GWP SSL	--
300-45_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	290	--[h]	5.0	--	3.30E-01	--	Scaled GWP SSL	--
300-45_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,600	101,630[i]	5.0	101,630	---	101,630	Scaled GWP SSL	No
300-45_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.023	--[h]	5.0	--	1.00E-01	--	Scaled GWP SSL	--
300-45_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.061	--[d]	5.0	--	5.00E-01	--	Scaled GWP SSL	--
300-45_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	--[d]	5.0	--	1.00E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.92E+06	--[h]	75.0	--	5.00E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	176	270,034	75.0	3,600	6.00E-01	3,600	Scaled GWP SSL	No
300-49_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,431	20,000[f]	75.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-49_Shallow	non-Rad	Barium	7440-39-3	µg/kg	89,874	--[h]	75.0	--	5.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	303	--[h]	75.0	--	2.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,170	--[h]	75.0	--	2.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,323	--[h]	75.0	--	5.00E-03	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,870	2.41E+08	75.0	3,219,985	1.00E+00	3,219,985	Scaled GWP SSL	No
300-49_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.59E+07	--[h]	75.0	--	5.00E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,629	1.06E+07	75.0	140,853	5.00E-01	140,853	Scaled GWP SSL	No [h]
300-49_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	361,805	--[h]	75.0	--	2.50E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,664	--[h]	75.0	--	4.00E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Silver	7440-22-4	µg/kg	621	--[h]	75.0	--	2.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,983	101,630[i]	75.0	101,630	---	101,630	Scaled GWP SSL	No
300-49_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	58,672	--[h]	75.0	--	2.50E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	54,651	--[h]	75.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-49_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.15	--[h]	75.0	--	1.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[d]	75.0	--	---	--	Scaled GWP SSL	--
300-49_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	75.0	--	5.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	--[d]	75.0	--	1.00E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.88E+06	--[h]	50.0	--	5.00E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	3,000	270,034	50.0	5,401	6.00E-01	5,401	Scaled GWP SSL	No
300-50_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	126	--[h]	50.0	--	1.65E-02	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,403	20,000[f]	50.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
300-50_Shallow	non-Rad	Barium	7440-39-3	µg/kg	103,029	--[h]	50.0	--	5.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	282	--[h]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	19	--[h]	50.0	--	3.30E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	463	3.52E+06	50.0	70,426	2.00E-01	70,426	Scaled GWP SSL	No
300-50_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	16,841	--[h]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,109	--[h]	50.0	--	5.00E-03	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Copper	7440-50-8	µg/kg	16,820	2.41E+08	50.0	4,829,978	1.00E+00	4,829,978	Scaled GWP SSL	No
300-50_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07	--[h]	50.0	--	5.00E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,381	1.06E+07	50.0	211,279	5.00E-01	211,279	Scaled GWP SSL	No [h]
300-50_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	318,120	--[h]	50.0	--	2.50E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,413	--[h]	50.0	--	4.00E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Silver	7440-22-4	µg/kg	2,992	--[h]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,938	101,630[i]	50.0	101,630	---	101,630	Scaled GWP SSL	No
300-50_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,964	--[h]	50.0	--	2.50E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,344	--[h]	50.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
300-50_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.056	--[h]	50.0	--	1.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	7.9	--[d]	50.0	--	---	--	Scaled GWP SSL	--
300-50_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.66	--[d]	50.0	--	5.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	Rad	Uranium-238	U-238	pCi/g	8.4	--[d]	50.0	--	1.00E+00	--	Scaled GWP SSL	--
300-8_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	574	--[h]	136.7	--	2.00E-01	--	Scaled GWP SSL	--
300-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,374	101,630[i]	136.7	101,630	---	101,630	Scaled GWP SSL	No
300-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.79	--[d]	136.7	--	---	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{mg}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
300-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82	--[c]	136.7	--	1.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_1	non-Rad	Aroclor-1248	12672-29-6	µg/kg	3,000	91,112	60.0	1,519	1.65E-02	1,519	Scaled GWP SSL	Yes [h]
316-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	19,014	20,000[e]	60.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
316-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	69	--[b]	60.0	--	3.30E-01	--	Scaled GWP SSL	--
316-1_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	98	8.41E+06	60.0	140,156	3.30E-01	140,156	Scaled GWP SSL	No
316-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	83,027	101,630[f]	60.0	101,630	---	101,630	Scaled GWP SSL	No
316-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.032	--[b]	60.0	--	1.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.2	--[d]	60.0	--	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	28	--[d]	60.0	--	1.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	1.11E+07	--[b]	50.0	--	5.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	490	270,034	50.0	5,401	6.00E-01	5,401	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	98	--[b]	50.0	--	1.65E-02	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	5,138	20,000[e]	50.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	129,106	--[b]	50.0	--	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	416	--[b]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	342	--[b]	50.0	--	3.30E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	474	3.52E+06	50.0	70,426	2.00E-01	70,426	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	50,455	--[b]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	9,703	--[b]	50.0	--	5.00E-03	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	1.37E+06	2.41E+08	50.0	4,829,978	1.00E+00	4,829,978	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	3.2	--[b]	50.0	--	1.65E-03	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.44E+07	--[b]	50.0	--	5.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	14,409	1.06E+07	50.0	211,279	5.00E-01	211,279	Scaled GWP SSL	No [h]
316-1_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	392,825	--[b]	50.0	--	2.50E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	1,105	1.41E+06	50.0	28,171	2.50E+00	28,171	Scaled GWP SSL	No [h]
316-1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	94,656	--[b]	50.0	--	4.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Phenol	108-95-2	µg/kg	28	1.49E+06	50.0	29,827	3.30E-01	29,827	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Selenium	7782-49-2	µg/kg	1,444	3.02E+06	50.0	60,491	1.00E+00	60,491	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Silver	7440-22-4	µg/kg	13,196	--[b]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	69,074	101,630[f]	50.0	101,630	---	101,630	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	56,707	--[b]	50.0	--	2.50E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	82,016	--[b]	50.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
316-1_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.37	--[b]	50.0	--	1.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Cobalt-60	10198-40-0	pCi/g	2.3	--[b]	50.0	--	5.00E-03	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	23	--[d]	50.0	--	---	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	2.6	--[d]	50.0	--	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Uranium-238	U-238	pCi/g	21	--[d]	50.0	--	1.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	µg/kg	62	--[b]	30.0	--	1.65E-02	--	Scaled GWP SSL	--
316-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	42,963	101,630[f]	30.0	101,630	---	101,630	Scaled GWP SSL	No
316-1_Shallow_4	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[b]	30.0	--	5.00E-03	--	Scaled GWP SSL	--
316-1_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	18	--[d]	30.0	--	---	--	Scaled GWP SSL	--
316-1_Shallow_4	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[d]	30.0	--	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_4	Rad	Uranium-238	U-238	pCi/g	14	--[d]	30.0	--	1.00E+00	--	Scaled GWP SSL	--
316-2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	210,452	101,630[f]	71.0	101,630	---	101,630	Scaled GWP SSL	Yes [m]
316-2_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.031	--[b]	71.0	--	1.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.092	--[b]	71.0	--	5.00E-03	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	86	--[d]	71.0	--	---	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	12	--[d]	71.0	--	5.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	69	--[d]	71.0	--	1.00E+00	--	Scaled GWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	µg/kg	697	91,112	117.0	779	1.65E-02	779	Scaled GWP SSL	No [h]
316-2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	42	--[b]	117.0	--	1.65E-02	--	Scaled GWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	110	--[b]	117.0	--	1.65E-02	--	Scaled GWP SSL	--
316-2_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	291,369	101,630[f]	117.0	101,630	---	101,630	Scaled GWP SSL	Yes [m]
316-2_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.45	--[b]	117.0	--	1.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.45	--[b]	117.0	--	5.00E-03	--	Scaled GWP SSL	--
316-2_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	115	--[d]	117.0	--	---	--	Scaled GWP SSL	--
316-2_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	11	--[d]	117.0	--	5.00E-01	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (m)	Selection of Soil Screening Level Protective of 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 pCi/g)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
316-2_Shallow_2	Rad	Uranium-238	U-238	pCi/g	96	--[d]	117.0	--	1.00E+00	--	Scaled GWP SSL	--
316-2_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	8,000	20,000[g]	167.5	20,000	1.00E+00	20,000	Scaled GWP SSL	No
316-2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	260	--[b]	167.5	--	3.30E-01	--	Scaled GWP SSL	--
316-2_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	180	8.41E+06	167.5	50,205	3.30E-01	50,205	Scaled GWP SSL	No
316-2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	73,174	101,630[f]	167.5	101,630	---	101,630	Scaled GWP SSL	No
316-2_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[d]	167.5	--	5.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	24	--[d]	167.5	--	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,070	20,000[g]	68.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
316-5_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	38	--[b]	68.0	--	1.50E-02	--	Scaled GWP SSL	--
316-5_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	146	--[b]	68.0	--	3.30E-01	--	Scaled GWP SSL	--
316-5_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	100	8.41E+06	68.0	123,667	3.30E-01	123,667	Scaled GWP SSL	No
316-5_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	271,835	101,630[f]	68.0	101,630	---	101,630	Scaled GWP SSL	Yes [e]
316-5_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.48	--[b]	68.0	--	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	2.3	--[b]	68.0	--	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	19	--[d]	68.0	--	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_1	Rad	Uranium-238	U-238	pCi/g	89	--[d]	68.0	--	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	140	270	68.0	4	5.00E-03	4	Scaled GWP SSL	Yes [i]
316-5_Shallow_2	non-Rad	2-Butoxyethanol	111-76-2	µg/kg	240	251,308	68.0	3,696	3.30E-01	3,696	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,180	20,000[g]	68.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	76,700	--[b]	68.0	--	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	180	--[b]	68.0	--	3.30E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	110	8.41E+06	68.0	123,667	3.30E-01	123,667	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,900	--[b]	68.0	--	2.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	38	--[b]	68.0	--	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	146	2.85E+07	68.0	419,168	3.30E-01	419,168	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	3,200	1.06E+07	68.0	155,352	5.00E-01	155,352	Scaled GWP SSL	No [h]
316-5_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	490	3.02E+06	68.0	44,479	1.00E+00	44,479	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Silver	7440-22-4	µg/kg	3,600	--[b]	68.0	--	2.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	204,701	101,630[f]	68.0	101,630	---	101,630	Scaled GWP SSL	Yes [e]
316-5_Shallow_2	Rad	Americium-241	14596-10-2	pCi/g	0.12	--[b]	68.0	--	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	1.7	--[b]	68.0	--	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[b]	68.0	--	5.00E-03	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	9.0	--[d]	68.0	--	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Uranium-238	U-238	pCi/g	68	--[d]	68.0	--	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	57	91,112	68.0	1,340	1.65E-02	1,340	Scaled GWP SSL	No [h]
316-5_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	70	--[b]	68.0	--	1.65E-02	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[b]	68.0	--	1.65E-02	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,300	20,000[g]	68.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
316-5_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	190	--[b]	68.0	--	3.30E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	1,500	2.85E+07	68.0	419,168	3.30E-01	419,168	Scaled GWP SSL	No
316-5_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	138,095	101,630[f]	68.0	101,630	---	101,630	Scaled GWP SSL	Yes [e]
316-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	--[b]	68.0	--	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.072	--[b]	68.0	--	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	7.7	--[d]	68.0	--	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	45	--[d]	68.0	--	1.00E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	25	--[b]	1.0	--	3.30E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	590	2.23E+06	1.0	2,227,917	2.00E-02	2,227,917	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	0.56	7,793	1.0	7,793	1.65E-03	7,793	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	0.39	285	1.0	285	1.65E-03	285	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.90E+06	--[b]	1.0	--	5.00E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	360	270,034	1.0	270,034	6.00E-01	270,034	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	850	--[b]	1.0	--	1.65E-02	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400	20,000[g]	1.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	78,600	--[b]	1.0	--	5.00E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	570	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	910	--[b]	1.0	--	3.30E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	1.08E+08	1.0	107,841,582	2.00E+00	107,841,582	Scaled GWP SSL	No

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot 10\ cm\frac{pCi}{g}/m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
331 LSLDF_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	340	8.41E+06	1.0	8,409,355	3.30E-01	8,409,355	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	140	3.52E+06	1.0	3,521,315	2.00E-01	3,521,315	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,300	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	1.0	--	5.00E-03	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,400	2.41E+08	1.0	241,498,892	1.00E+00	241,498,892	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	13	2,733	1.0	2,733	3.30E-03	2,733	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	98	2.85E+07	1.0	28,503,404	3.30E-01	28,503,404	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	1.9	2.46E+06	1.0	2,455,973	1.65E-03	2,455,973	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan II	33213-65-9	µg/kg	3.1	2.46E+06	1.0	2,455,973	3.30E-03	2,455,973	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.20E+07	--[b]	1.0	--	5.00E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	9,000	1.06E+07	1.0	10,563,946	5.00E-01	10,563,946	Scaled GWP SSL	No [h]
331 LSLDF_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	349,000	--[b]	1.0	--	2.50E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	110	1.41E+06	1.0	1,408,526	2.50E+00	1,408,526	Scaled GWP SSL	No [h]
331 LSLDF_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	3.3	--[b]	1.0	--	1.65E-02	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	11	2,098	1.0	2,098	5.00E-03	2,098	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	590	2.58E+07	1.0	25,827,075	2.00E+00	25,827,075	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,000	--[b]	1.0	--	4.00E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	41,700	1.36E+07	1.0	13,616,986	2.50E+00	13,616,986	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	9,500	3.03E+06	1.0	3,025,997	---	3,025,997	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,100	--[b]	1.0	--	2.00E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,402	101,630[f]	1.0	101,630	---	101,630	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,100	--[b]	1.0	--	2.50E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	--[b]	1.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
331 LSLDF_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	--[d]	1.0	--	---	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.47	--[d]	1.0	--	1.00E+00	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	279	1.07E+06	40.3	26,584	3.30E-01	26,584	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	31	--[b]	40.3	--	5.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,300	270,034	40.3	6,701	6.00E-01	6,701	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	27	--[b]	40.3	--	1.65E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	18	--[b]	40.3	--	1.65E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,159	20,000[g]	40.3	20,000	1.00E+00	20,000	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Barium	7440-39-3	µg/kg	292,072	--[b]	40.3	--	5.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	43	--[b]	40.3	--	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	43	--[b]	40.3	--	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	46	--[b]	40.3	--	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32	--[b]	40.3	--	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	2,079	--[b]	40.3	--	2.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	432	--[b]	40.3	--	3.30E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Boron	7440-42-8	µg/kg	294,463	1.08E+08	40.3	2,675,970	2.00E+00	2,675,970	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	793	3.52E+06	40.3	87,378	2.00E-01	87,378	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	18,006	--[b]	40.3	--	2.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	63	--[b]	40.3	--	1.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,207	--[b]	40.3	--	5.00E-03	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Copper	7440-50-8	µg/kg	53,981	2.41E+08	40.3	5,992,528	1.00E+00	5,992,528	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	78	1.16E+06	40.3	28,743	3.30E-01	28,743	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	37	2.85E+07	40.3	707,281	3.30E-01	707,281	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	79	--[b]	40.3	--	5.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	28	--[b]	40.3	--	3.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Lead	7439-92-1	µg/kg	40,139	1.06E+07	40.3	262,133	5.00E-01	262,133	Scaled GWP SSL	No [h]
600-243_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	208,289	--[b]	40.3	--	2.50E+00	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,869	2.58E+07	40.3	640,870	2.00E+00	640,870	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	204	2.26E+06	40.3	56,037	2.00E+00	56,037	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	21,395	--[b]	40.3	--	4.00E+00	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	70	--[b]	40.3	--	5.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	5,709	3.02E+06	40.3	75,051	1.00E+00	75,051	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Silver	7440-22-4	µg/kg	500	--[b]	40.3	--	2.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	95,319	2.00E+06[e]	40.3	2,000,000	---	2,000,000	Scaled GWP SSL	No

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a]	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPH/OILH	µg/kg	334,524	2.00E+06[d]	40.3	2,000,000	--	2,000,000	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,986	--[b]	40.3	--	2.50E+00	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	84,099	--[b]	40.3	--	1.00E+00	--	Scaled GWP SSL	-- [h]
600-259_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.068	--[b]	17.0	--	1.00E-01	--	Scaled GWP SSL	--
600-259_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.038	--[b]	17.0	--	1.00E-01	--	Scaled GWP SSL	--
600-47_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,300	20,000[f]	22.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
600-47_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,000	--[b]	22.0	--	5.00E-01	--	Scaled GWP SSL	--
600-47_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	500	--[b]	22.0	--	2.00E-01	--	Scaled GWP SSL	--
600-47_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	90	3.52E+06	22.0	160,060	2.00E-01	160,060	Scaled GWP SSL	No
600-47_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	5,500	--[b]	22.0	--	2.00E-01	--	Scaled GWP SSL	--
600-47_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,500	1.06E+07	22.0	480,179	5.00E-01	480,179	Scaled GWP SSL	No [h]
600-47_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,303	101,630[e]	22.0	101,630	---	101,630	Scaled GWP SSL	No
600-47_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	22.0	--	---	--	Scaled GWP SSL	--
600-47_Shallow	Rad	Uranium-238	U-238	pCi/g	1.6	--[d]	22.0	--	1.00E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Aluminum	7429-90-5	µg/kg	6.37E+06	--[b]	32.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,760	--[b]	32.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Aroclor-1260	11096-82-5	µg/kg	294	--[b]	32.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	2,550	20,000[f]	32.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-1_Deep	non-Rad	Barium	7440-39-3	µg/kg	299,000	--[b]	32.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Beryllium	7440-41-7	µg/kg	218	--[b]	32.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Boron	7440-42-8	µg/kg	1,360	1.08E+08	32.0	3,370,049	2.00E+00	3,370,049	Scaled GWP SSL	No
618-1_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	263	3.52E+06	32.0	110,041	2.00E-01	110,041	Scaled GWP SSL	No
618-1_Deep	non-Rad	Chromium	7440-47-3	µg/kg	7,740	--[b]	32.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	32.0	--	5.00E-03	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Copper	7440-50-8	µg/kg	46,300	2.41E+08	32.0	7,546,840	1.00E+00	7,546,840	Scaled GWP SSL	No
618-1_Deep	non-Rad	Fluoride	16984-48-8	µg/kg	2,800	--[b]	32.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Iron	7439-89-6	µg/kg	2.47E+07	--[b]	32.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Lead	7439-92-1	µg/kg	58,400	1.06E+07	32.0	330,123	5.00E-01	330,123	Scaled GWP SSL	No [h]
618-1_Deep	non-Rad	Lithium	7439-93-2	µg/kg	5,980	--[b]	32.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Manganese	7439-96-5	µg/kg	352,000	--[b]	32.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	1,180	1.41E+06	32.0	44,016	2.50E+00	44,016	Scaled GWP SSL	No [h]
618-1_Deep	non-Rad	Molybdenum	7439-98-7	µg/kg	493	2.58E+07	32.0	807,096	2.00E+00	807,096	Scaled GWP SSL	No
618-1_Deep	non-Rad	Nickel	7440-02-0	µg/kg	17,600	--[b]	32.0	--	4.00E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Nitrate	14797-55-8	µg/kg	1,700	1.36E+07	32.0	425,531	2.50E+00	425,531	Scaled GWP SSL	No
618-1_Deep	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	220	3.03E+06	32.0	94,562	---	94,562	Scaled GWP SSL	No
618-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	89,439	101,630[e]	32.0	101,630	---	101,630	Scaled GWP SSL	No
618-1_Deep	non-Rad	Vanadium	7440-62-2	µg/kg	73,000	--[b]	32.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Zinc	7440-66-6	µg/kg	134,000	--[b]	32.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.46	--[b]	32.0	--	1.00E-01	--	Scaled GWP SSL	--
618-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	33	--[d]	32.0	--	---	--	Scaled GWP SSL	--
618-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	2.7	--[d]	32.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep	Rad	Uranium-238	U-238	pCi/g	32	--[d]	32.0	--	1.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06	--[b]	25.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	407	270,034	25.0	10,801	6.00E-01	10,801	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1.24E+06	--[b]	25.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	99	--[b]	25.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,580	20,000[f]	25.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	1.87E+06	--[b]	25.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	323	--[b]	25.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,620	1.08E+08	25.0	4,313,663	2.00E+00	4,313,663	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,030	3.52E+06	25.0	140,853	2.00E-01	140,853	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,900	--[b]	25.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,920	--[b]	25.0	--	5.00E-03	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	68,700	2.41E+08	25.0	9,659,956	1.00E+00	9,659,956	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	3,300	--[b]	25.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.41E+07	--[b]	25.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	333,000	1.06E+07	25.0	422,558	5.00E-01	422,558	Scaled GWP SSL	No [h]

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[h] $\left(\frac{\mu g}{kg} \cdot m \cdot cf \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[i]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-1_Deep_Focused	non-Rad	Lithium	7439-93-2	µg/kg	8,450	--[b]	25.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	351,000	--[b]	25.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8,940	1.41E+06	25.0	56,341	2.50E+00	56,341	Scaled GWP SSL	No [h]
618-1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,140	2.58E+07	25.0	1,033,083	2.00E+00	1,033,083	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,700	--[b]	25.0	--	4.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	11,900	1.36E+07	25.0	544,679	2.50E+00	544,679	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	1,560	3.03E+06	25.0	121,040	--	121,040	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,290	--[b]	25.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	196,154	101,630[c]	25.0	101,630	--	101,630	Scaled GWP SSL	Yes [m]
618-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	70,900	--[b]	25.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	82,000	--[b]	25.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	6.5	--[b]	25.0	--	1.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	70	--[d]	25.0	--	--	--	Scaled GWP SSL	--
618-1_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.5	--[d]	25.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	65	--[d]	25.0	--	1.00E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.21E+06	--[b]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	264	--[b]	40.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	54	--[b]	40.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,280	20,000[f]	40.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	97,200	--[b]	40.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	188	--[b]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,190	1.08E+08	40.0	2,696,040	2.00E+00	2,696,040	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	68	3.52E+06	40.0	88,033	2.00E-01	88,033	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,930	--[b]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,360	--[b]	40.0	--	5.00E-03	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,400	2.41E+08	40.0	6,037,472	1.00E+00	6,037,472	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	400	--[b]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07	--[b]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,100	1.06E+07	40.0	264,099	5.00E-01	264,099	Scaled GWP SSL	No [h]
618-1_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	6,380	--[b]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	300,000	--[b]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	31	1.41E+06	40.0	35,213	2.50E+00	35,213	Scaled GWP SSL	No [h]
618-1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	336	2.58E+07	40.0	645,677	2.00E+00	645,677	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,150	--[b]	40.0	--	4.00E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	1,600	1.36E+07	40.0	340,425	2.50E+00	340,425	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	300	3.03E+06	40.0	75,650	--	75,650	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,224	101,630[c]	40.0	101,630	--	101,630	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	56,300	--[b]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,100	--[b]	40.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	--[d]	40.0	--	--	--	Scaled GWP SSL	--
618-1_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	--[d]	40.0	--	1.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.22E+07	--[b]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	455	270,034	40.0	6,751	6.00E-01	6,751	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	35	91,112	40.0	2,278	1.65E-02	2,278	Scaled GWP SSL	No [h]
618-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	981	--[b]	40.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	56	--[b]	40.0	--	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,090	20,000[f]	40.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	102,000	--[b]	40.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	371	--[b]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,740	1.08E+08	40.0	2,696,040	2.00E+00	2,696,040	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	266	3.52E+06	40.0	88,033	2.00E-01	88,033	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,500	--[b]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	40.0	--	5.00E-03	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,800	2.41E+08	40.0	6,037,472	1.00E+00	6,037,472	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	900	--[b]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.28E+07	--[b]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,210	1.06E+07	40.0	264,099	5.00E-01	264,099	Scaled GWP SSL	No [h]

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pC_i}{pC_i} \ln\left(\frac{pC_i}{E}\right)\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-1_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	13,300	--[h]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	403,000	--[h]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	198	1.41E+06	40.0	35,213	2.50E+00	35,213	Scaled GWP SSL	No [h]
618-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	356	2.58E+07	40.0	645,677	2.00E+00	645,677	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	16,800	--[h]	40.0	--	4.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	3,800	1.36E+07	40.0	340,425	2.50E+00	340,425	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	260	3.03E+06	40.0	75,650	---	75,650	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,120	--[h]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	24,957	101,630[f]	40.0	101,630	---	101,630	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,700	--[h]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	68,100	--[h]	40.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	40.0	--	---	--	Scaled GWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.99	--[d]	40.0	--	5.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	8.2	--[d]	40.0	--	1.00E+00	--	Scaled GWP SSL	--
618-12_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	8,557	20,000[g]	130.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-12_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	63	--[h]	130.0	--	3.30E-01	--	Scaled GWP SSL	--
618-12_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	60	8.41E+06	130.0	64,687	3.30E-01	64,687	Scaled GWP SSL	No
618-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	32,092	101,630[f]	130.0	101,630	---	101,630	Scaled GWP SSL	No
618-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.47	--[d]	130.0	--	5.00E-01	--	Scaled GWP SSL	--
618-12_Shallow	Rad	Uranium-238	U-238	pCi/g	11	--[d]	130.0	--	1.00E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Acetone	67-64-1	µg/kg	8.6	2.23E+06	40.0	55,698	2.00E-02	55,698	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.34E+06	--[h]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	312	270,034	40.0	6,751	6.00E-01	6,751	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,500	20,000[g]	40.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Barium	7440-39-3	µg/kg	74,000	--[h]	40.0	--	5.00E-01	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	212	--[h]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,050	1.08E+08	40.0	2,696,040	2.00E+00	2,696,040	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	63	3.52E+06	40.0	88,033	2.00E-01	88,033	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,700	--[h]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,290	--[h]	40.0	--	5.00E-03	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,500	2.41E+08	40.0	6,037,472	1.00E+00	6,037,472	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.01E+07	--[h]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,620	1.06E+07	40.0	264,099	5.00E-01	264,099	Scaled GWP SSL	No [h]
618-13_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	344,000	--[h]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	5.1	2,098	40.0	52	5.00E-03	52	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	420	2.58E+07	40.0	645,677	2.00E+00	645,677	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,400	--[h]	40.0	--	4.00E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Tin	7440-31-5	µg/kg	1,050	--[h]	40.0	--	1.00E+01	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,061	101,630[f]	40.0	101,630	---	101,630	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	55,800	--[h]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,400	--[h]	40.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.038	--[h]	40.0	--	1.00E-01	--	Scaled GWP SSL	--
618-13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	--[d]	40.0	--	---	--	Scaled GWP SSL	--
618-13_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	--[d]	40.0	--	1.00E+00	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	5.9	2.23E+06	40.0	55,698	2.00E-02	55,698	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.22E+06	--[h]	40.0	--	5.00E+00	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	233	270,034	40.0	6,751	6.00E-01	6,751	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,390	20,000[g]	40.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	57,700	--[h]	40.0	--	5.00E-01	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	184	--[h]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	960	1.08E+08	40.0	2,696,040	2.00E+00	2,696,040	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	47	3.52E+06	40.0	88,033	2.00E-01	88,033	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,740	--[h]	40.0	--	2.00E-01	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,710	--[h]	40.0	--	5.00E-03	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,100	2.41E+08	40.0	6,037,472	1.00E+00	6,037,472	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	150	6,000[j]	40.0	6,000	---	6,000	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07	--[h]	40.0	--	5.00E+00	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-13_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,940	1.06E+07	40.0	264,099	5.00E-01	264,099	Scaled GWP SSL	No [h]
618-13_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	268,000	--[b]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	5.0	2,098	40.0	52	5.00E-03	52	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	297	2.58E+07	40.0	645,677	2.00E+00	645,677	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,000	--[b]	40.0	--	4.00E+00	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	745	--[b]	40.0	--	1.00E+01	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,855	101,630[c]	40.0	101,630	---	101,630	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,600	--[b]	40.0	--	2.50E+00	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,100	--[b]	40.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-13_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	40.0	--	---	--	Scaled GWP SSL	--
618-13_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.96	--[d]	40.0	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	1,500	20,000[e]	47.7	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-2_Deep	non-Rad	Barium	7440-39-3	µg/kg	83,300	--[b]	47.7	--	5.00E-01	--	Scaled GWP SSL	--
618-2_Deep	non-Rad	Chromium	7440-47-3	µg/kg	6,700	--[b]	47.7	--	2.00E-01	--	Scaled GWP SSL	--
618-2_Deep	non-Rad	Lead	7439-92-1	µg/kg	6,600	1.06E+07	47.7	221,621	5.00E-01	221,621	Scaled GWP SSL	No [h]
618-2_Deep	non-Rad	Selenium	7782-49-2	µg/kg	780	3.02E+06	47.7	63,452	1.00E+00	63,452	Scaled GWP SSL	No
618-2_Deep	non-Rad	Tin	7440-31-5	µg/kg	2,900	--[b]	47.7	--	1.00E+01	--	Scaled GWP SSL	--
618-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	491,176	101,630[c]	47.7	101,630	---	101,630	Scaled GWP SSL	Yes [h]
618-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	7.9	--[b]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1.0	--[b]	47.7	--	1.00E-01	--	Scaled GWP SSL	--
618-2_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	1.5	--[b]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	91	--[b]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	Rad	Plutonium-241	14119-32-5	pCi/g	42	--[b]	47.7	--	---	--	Scaled GWP SSL	--
618-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	12	227,428	47.7	4,771	5.00E-03	4,771	Scaled GWP SSL	No
618-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	161	--[d]	47.7	--	---	--	Scaled GWP SSL	--
618-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.78	--[d]	47.7	--	5.00E-01	--	Scaled GWP SSL	--
618-2_Deep	Rad	Uranium-238	U-238	pCi/g	165	--[d]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	6.9	--[b]	47.7	--	1.65E-02	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	20,000[e]	47.7	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-2_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	109,000	--[b]	47.7	--	5.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	27	--[b]	47.7	--	3.30E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	200	3.52E+06	47.7	73,874	2.00E-01	73,874	Scaled GWP SSL	No
618-2_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400	--[b]	47.7	--	2.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	18	2.85E+07	47.7	597,974	3.30E-01	597,974	Scaled GWP SSL	No
618-2_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,800	1.06E+07	47.7	221,621	5.00E-01	221,621	Scaled GWP SSL	No [h]
618-2_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,200	3.02E+06	47.7	63,452	1.00E+00	63,452	Scaled GWP SSL	No
618-2_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	600	--[b]	47.7	--	2.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Tin	7440-31-5	µg/kg	42,500	--[b]	47.7	--	1.00E+01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	150,259	101,630[c]	47.7	101,630	---	101,630	Scaled GWP SSL	Yes [h]
618-2_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	9.2	--[b]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.1	--[b]	47.7	--	1.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	1.6	--[b]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	92	--[b]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-241	14119-32-5	pCi/g	33	--[b]	47.7	--	---	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	227,428	47.7	4,771	5.00E-03	4,771	Scaled GWP SSL	No
618-2_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	48	--[d]	47.7	--	---	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	2.4	--[d]	47.7	--	5.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	50	--[d]	47.7	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	1,900	20,000[e]	60.2	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	79,100	--[b]	60.2	--	5.00E-01	--	Scaled GWP SSL	--
618-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,100	--[b]	60.2	--	2.00E-01	--	Scaled GWP SSL	--
618-2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,600	1.06E+07	60.2	175,413	5.00E-01	175,413	Scaled GWP SSL	No [h]
618-2_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	760	3.02E+06	60.2	50,223	1.00E+00	50,223	Scaled GWP SSL	No
618-2_Shallow	non-Rad	Tin	7440-31-5	µg/kg	2,400	--[b]	60.2	--	1.00E+01	--	Scaled GWP SSL	--
618-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,852	101,630[c]	60.2	101,630	---	101,630	Scaled GWP SSL	No
618-2_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.81	--[b]	60.2	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.2	--[b]	60.2	--	1.00E-01	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	7.7	--[b]	60.2	--	1.00E+00	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.2	--[d]	60.2	--	---	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.21	--[d]	60.2	--	5.00E-01	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Uranium-238	U-238	pCi/g	2.2	--[d]	60.2	--	1.00E+00	--	Scaled GWP SSL	--
618-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	20,000[e]	52.3	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	76,500	--[b]	52.3	--	5.00E-01	--	Scaled GWP SSL	--
618-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,700	--[b]	52.3	--	2.00E-01	--	Scaled GWP SSL	--
618-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,900	1.06E+07	52.3	201,859	5.00E-01	201,859	Scaled GWP SSL	No [h]
618-3_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	659	3.02E+06	52.3	57,794	1.00E+00	57,794	Scaled GWP SSL	No
618-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,224	101,630[f]	52.3	101,630	---	101,630	Scaled GWP SSL	No
618-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.68	--[d]	52.3	--	---	--	Scaled GWP SSL	--
618-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	--[d]	52.3	--	1.00E+00	--	Scaled GWP SSL	--
618-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	238,577	101,630[f]	52.3	101,630	---	101,630	Scaled GWP SSL	Yes [m]
618-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	80	--[d]	52.3	--	---	--	Scaled GWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.8	--[d]	52.3	--	5.00E-01	--	Scaled GWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	79	--[d]	52.3	--	1.00E+00	--	Scaled GWP SSL	--
618-4_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	20,000[e]	47.3	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-4_Deep	non-Rad	Lead	7439-92-1	µg/kg	20,000	1.06E+07	47.3	223,182	5.00E-01	223,182	Scaled GWP SSL	No [h]
618-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	64,506	101,630[f]	47.3	101,630	---	101,630	Scaled GWP SSL	No
618-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	20	--[d]	47.3	--	---	--	Scaled GWP SSL	--
618-4_Deep	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[d]	47.3	--	5.00E-01	--	Scaled GWP SSL	--
618-4_Deep	Rad	Uranium-238	U-238	pCi/g	22	--[d]	47.3	--	1.00E+00	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	2-Butanone	78-93-3	µg/kg	130	1.67E+06	47.3	35,321	3.30E-01	35,321	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Acetone	67-64-1	µg/kg	16	2.23E+06	47.3	47,069	2.00E-02	47,069	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,600	--[b]	47.3	--	1.65E-02	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	20,000[e]	47.3	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	104,000	--[b]	47.3	--	5.00E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	4,700	--[b]	47.3	--	3.30E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,500	3.52E+06	47.3	74,394	2.00E-01	74,394	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	27,700	--[b]	47.3	--	2.00E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Diethyl ether	60-29-7	µg/kg	1.0	664,052	47.3	14,029	3.30E-03	14,029	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,900	1.06E+07	47.3	223,182	5.00E-01	223,182	Scaled GWP SSL	No [h]
618-4_Deep_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	40	2,098	47.3	44	5.00E-03	44	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Phenol	108-95-2	µg/kg	110	1.49E+06	47.3	31,508	3.30E-01	31,508	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	24	16,996	47.3	359	5.00E-03	359	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Toluene	108-88-3	µg/kg	4.8	1.15E+06	47.3	24,400	5.00E-03	24,400	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,000	2.00E+06[g]	47.3	2,000,000	---	2,000,000	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	µg/kg	42,000	--[g]	47.3	--	---	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high bol	TPH/OILH	µg/kg	65	2.00E+06[g]	47.3	2,000,000	---	2,000,000	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	20,777	101,630[f]	47.3	101,630	---	101,630	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	1,334	47.3	28	5.00E-03	28	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloromonofluoromethane	75-69-4	µg/kg	12	1.95E+06	47.3	41,142	---	41,142	Scaled GWP SSL	No
618-4_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	7.2	--[d]	47.3	--	---	--	Scaled GWP SSL	--
618-4_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.51	--[d]	47.3	--	5.00E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	6.9	--[d]	47.3	--	1.00E+00	--	Scaled GWP SSL	--
618-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,200	20,000[e]	30.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	49,000	1.06E+07	30.0	352,132	5.00E-01	352,132	Scaled GWP SSL	No [h]
618-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	7,456	101,630[f]	30.0	101,630	---	101,630	Scaled GWP SSL	No
618-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	3.2	--[d]	30.0	--	---	--	Scaled GWP SSL	--
618-4_Shallow	Rad	Uranium-238	U-238	pCi/g	3.1	--[d]	30.0	--	1.00E+00	--	Scaled GWP SSL	--
618-5_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	20,000[e]	34.2	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-5_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	470	3.52E+06	34.2	102,962	2.00E-01	102,962	Scaled GWP SSL	No
618-5_Deep	non-Rad	Chromium	7440-47-3	µg/kg	14,700	--[b]	34.2	--	2.00E-01	--	Scaled GWP SSL	--
618-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	82,300	1.06E+07	34.2	308,887	5.00E-01	308,887	Scaled GWP SSL	No [h]
618-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	26,618	101,630[f]	34.2	101,630	---	101,630	Scaled GWP SSL	No
618-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	8.6	--[d]	34.2	--	---	--	Scaled GWP SSL	--
618-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.46	--[d]	34.2	--	5.00E-01	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{\frac{\mu g}{kg}} \times \frac{pCi}{\frac{pCi}{g}} \times \frac{m^3}{L} \times \frac{L}{m^3} \times \frac{m}{K}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-5_Deep	Rad	Uranium-238	U-238	pCi/g	8.9	--[d]	34.2	--	1.00E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.65E+06	--[b]	14.1	--	5.00E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,800	270,034	14.1	19,151	6.00E-01	19,151	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,500	20,000[e]	14.1	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	106,000	--[b]	14.1	--	5.00E-01	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	672	--[b]	14.1	--	2.00E-01	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,500	--[b]	14.1	--	2.00E-01	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,500	--[b]	14.1	--	5.00E-03	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,400	2.41E+08	14.1	17,127,581	1.00E+00	17,127,581	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.02E+07	--[b]	14.1	--	5.00E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,600	1.06E+07	14.1	749,216	5.00E-01	749,216	Scaled GWP SSL	No [h]
618-5_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	579,000	--[b]	14.1	--	2.50E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	33	1.41E+06	14.1	99,895	2.50E+00	99,895	Scaled GWP SSL	No [h]
618-5_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,300	--[b]	14.1	--	4.00E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,270	3.02E+06	14.1	214,508	1.00E+00	214,508	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	36,540	101,630[f]	14.1	101,630	---	101,630	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	79,500	--[b]	14.1	--	2.50E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	65,800	--[b]	14.1	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-5_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	14.1	--	---	--	Scaled GWP SSL	--
618-5_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.48	--[d]	14.1	--	5.00E-01	--	Scaled GWP SSL	--
618-5_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	12	--[d]	14.1	--	1.00E+00	--	Scaled GWP SSL	--
618-5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,300	20,000[e]	50.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,300	--[b]	50.0	--	2.00E-01	--	Scaled GWP SSL	--
618-5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,100	1.06E+07	50.0	211,279	5.00E-01	211,279	Scaled GWP SSL	No [h]
618-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,849	101,630[f]	50.0	101,630	---	101,630	Scaled GWP SSL	No
618-5_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.94	--[d]	50.0	--	---	--	Scaled GWP SSL	--
618-5_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	--[d]	50.0	--	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.25E+06	--[b]	92.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	560	270,034	92.0	2,935	6.00E-01	2,935	Scaled GWP SSL	No
618-7_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	1,891	20,000[e]	92.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-7_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	68,874	--[b]	92.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	278	--[b]	92.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	65	3.52E+06	92.0	38,275	2.00E-01	38,275	Scaled GWP SSL	No
618-7_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	10,227	--[b]	92.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	9,152	--[b]	92.0	--	5.00E-03	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	16,120	2.41E+08	92.0	2,624,988	1.00E+00	2,624,988	Scaled GWP SSL	No
618-7_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07	--[b]	92.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	14,567	1.06E+07	92.0	114,826	5.00E-01	114,826	Scaled GWP SSL	No [h]
618-7_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	326,067	--[b]	92.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	44	1.41E+06	92.0	15,310	2.50E+00	15,310	Scaled GWP SSL	No [h]
618-7_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	20,977	--[b]	92.0	--	4.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,547	--[b]	92.0	--	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	10,814	101,630[f]	92.0	101,630	---	101,630	Scaled GWP SSL	No
618-7_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	74,576	--[b]	92.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	49,177	--[b]	92.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-7_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.067	--[b]	92.0	--	1.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	3.6	--[d]	92.0	--	---	--	Scaled GWP SSL	--
618-7_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.36	--[d]	92.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_1	Rad	Uranium-238	U-238	pCi/g	3.6	--[d]	92.0	--	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	4.97E+06	--[b]	11.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	660	270,034	11.0	24,549	6.00E-01	24,549	Scaled GWP SSL	No
618-7_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	20,000[e]	11.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-7_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	73,800	--[b]	11.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	440	--[b]	11.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,800	--[b]	11.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	9,300	--[b]	11.0	--	5.00E-03	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,600	2.41E+08	11.0	21,954,445	1.00E+00	21,954,445	Scaled GWP SSL	No

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{EPC}{K_d} \text{ as } CF\frac{pCi}{g} \text{ in}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-7_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07	--[b]	11.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	2,800	1.06E+07	11.0	960,359	5.00E-01	960,359	Scaled GWP SSL	No [h]
618-7_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	364,000	--[b]	11.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	20	1.41E+06	11.0	128,048	2.50E+00	128,048	Scaled GWP SSL	No [h]
618-7_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	9,700	--[b]	11.0	--	4.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,500	--[b]	11.0	--	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,574	101,630[c]	11.0	101,630	---	101,630	Scaled GWP SSL	No
618-7_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	74,700	--[b]	11.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	46,200	--[b]	11.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-7_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	--[d]	11.0	--	---	--	Scaled GWP SSL	--
618-7_Shallow_2	Rad	Uranium-238	U-238	pCi/g	0.53	--[d]	11.0	--	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	6.74E+06	--[b]	21.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	450	270,034	21.0	12,859	6.00E-01	12,859	Scaled GWP SSL	No
618-7_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	20,000[e]	21.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-7_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	82,500	--[b]	21.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	310	--[b]	21.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	190	3.52E+06	21.0	167,682	2.00E-01	167,682	Scaled GWP SSL	No
618-7_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	10,100	--[b]	21.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	21.0	--	5.00E-03	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	13,600	2.41E+08	21.0	11,499,947	1.00E+00	11,499,947	Scaled GWP SSL	No
618-7_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.43E+07	--[b]	21.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	4,300	1.06E+07	21.0	503,045	5.00E-01	503,045	Scaled GWP SSL	No [h]
618-7_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	357,000	--[b]	21.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	20	1.41E+06	21.0	67,073	2.50E+00	67,073	Scaled GWP SSL	No [h]
618-7_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	10,100	--[b]	21.0	--	4.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Tin	7440-31-5	µg/kg	1,800	--[b]	21.0	--	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,852	101,630[c]	21.0	101,630	---	101,630	Scaled GWP SSL	No
618-7_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	68,200	--[b]	21.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	44,500	--[b]	21.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-7_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	21.0	--	---	--	Scaled GWP SSL	--
618-7_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.085	--[d]	21.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_3	Rad	Uranium-238	U-238	pCi/g	0.95	--[d]	21.0	--	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Aluminum	7429-90-5	µg/kg	5.65E+06	--[b]	48.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Antimony	7440-36-0	µg/kg	250	270,034	48.0	5,626	6.00E-01	5,626	Scaled GWP SSL	No
618-7_Shallow_4	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	20,000[e]	48.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-7_Shallow_4	non-Rad	Barium	7440-39-3	µg/kg	57,900	--[b]	48.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Beryllium	7440-41-7	µg/kg	220	--[b]	48.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Cadmium	7440-43-9	µg/kg	90	3.52E+06	48.0	73,361	2.00E-01	73,361	Scaled GWP SSL	No
618-7_Shallow_4	non-Rad	Chromium	7440-47-3	µg/kg	11,400	--[b]	48.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Cobalt	7440-48-4	µg/kg	6,700	--[b]	48.0	--	5.00E-03	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Copper	7440-50-8	µg/kg	13,200	2.41E+08	48.0	5,031,227	1.00E+00	5,031,227	Scaled GWP SSL	No
618-7_Shallow_4	non-Rad	Iron	7439-89-6	µg/kg	2.12E+07	--[b]	48.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Lead	7439-92-1	µg/kg	3,000	1.06E+07	48.0	220,082	5.00E-01	220,082	Scaled GWP SSL	No [h]
618-7_Shallow_4	non-Rad	Manganese	7439-96-5	µg/kg	285,000	--[b]	48.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Nickel	7440-02-0	µg/kg	12,900	--[b]	48.0	--	4.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Tin	7440-31-5	µg/kg	710	--[b]	48.0	--	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,064	101,630[c]	48.0	101,630	---	101,630	Scaled GWP SSL	No
618-7_Shallow_4	non-Rad	Vanadium	7440-62-2	µg/kg	54,800	--[b]	48.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Zinc	7440-66-6	µg/kg	37,000	--[b]	48.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-7_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.69	--[d]	48.0	--	---	--	Scaled GWP SSL	--
618-7_Shallow_4	Rad	Uranium-238	U-238	pCi/g	0.76	--[d]	48.0	--	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	150	3.69E+07	240.0	153,673	1.00E-01	153,673	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.61E+06	--[b]	240.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	980	270,034	240.0	1,125	6.00E-01	1,125	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	6.7	91,112	240.0	380	1.65E-02	380	Scaled GWP SSL	No [h]
618-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,200	20,000[e]	240.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	92,800	--[b]	240.0	--	5.00E-01	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pCi}{g}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-7_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	88	-- [b]	240.0	--	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	66	-- [b]	240.0	--	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	52	-- [b]	240.0	--	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	11	-- [b]	240.0	--	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	370	-- [b]	240.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	470	-- [b]	240.0	--	3.30E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	6,200	3.52E+06	240.0	14,672	2.00E-01	14,672	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	65,900	-- [b]	240.0	--	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	69	-- [b]	240.0	--	1.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,000	-- [b]	240.0	--	5.00E-03	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	25,000	2.41E+08	240.0	1,006,245	1.00E+00	1,006,245	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Dibenz(a,h)anthracene	53-70-3	µg/kg	45	-- [b]	240.0	--	3.00E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	33	2.85E+07	240.0	118,764	3.30E-01	118,764	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	48	-- [b]	240.0	--	5.00E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2,87E+07	-- [b]	240.0	--	5.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,500	1.06E+07	240.0	44,016	5.00E-01	44,016	Scaled GWP SSL	No [h]
618-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	425,000	-- [b]	240.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	1.41E+06	240.0	5,869	2.50E+00	5,869	Scaled GWP SSL	No [h]
618-7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	17,200	-- [b]	240.0	--	4.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	410	-- [b]	240.0	--	5.00E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,200	-- [b]	240.0	--	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPH/OILH	µg/kg	680,000	2.00E+06[e]	240.0	2,000,000	--	2,000,000	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	19,563	101,630[f]	240.0	101,630	--	101,630	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	80,500	-- [b]	240.0	--	2.50E+00	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,400	-- [b]	240.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-7_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.010	-- [b]	240.0	--	1.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	-- [d]	240.0	--	---	--	Scaled GWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.97	-- [d]	240.0	--	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	6.4	-- [d]	240.0	--	1.00E+00	--	Scaled GWP SSL	--
618-8_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	20,000[g]	28.8	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-8_Shallow	non-Rad	Barium	7440-39-3	µg/kg	97,600	-- [b]	28.8	--	5.00E-01	--	Scaled GWP SSL	--
618-8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,400	-- [b]	28.8	--	2.00E-01	--	Scaled GWP SSL	--
618-8_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,100	1.06E+07	28.8	367,442	5.00E-01	367,442	Scaled GWP SSL	No [h]
618-8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	846	3.02E+06	28.8	105,202	1.00E+00	105,202	Scaled GWP SSL	No
618-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,935	101,630[f]	28.8	101,630	---	101,630	Scaled GWP SSL	No
618-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.2	-- [d]	28.8	--	---	--	Scaled GWP SSL	--
618-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.73	-- [d]	28.8	--	1.00E+00	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	110	270	7.0	39	5.00E-03	39	Scaled GWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	680	2.23E+06	7.0	318,274	2.00E-02	318,274	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	390	7,793	7.0	1,113	1.65E-03	1,113	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06	-- [b]	7.0	--	5.00E+00	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	µg/kg	1,900	-- [b]	7.0	--	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	µg/kg	1,900	2,903	7.0	415	1.65E-02	415	Scaled GWP SSL	Yes [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1232	11141-16-5	µg/kg	1,900	2,903	7.0	415	1.65E-02	415	Scaled GWP SSL	Yes [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1242	53469-21-9	µg/kg	1,900	97,738	7.0	13,963	1.65E-02	13,963	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,900	91,112	7.0	13,016	1.65E-02	13,016	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,900	-- [b]	7.0	--	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,900	-- [b]	7.0	--	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	20,000[g]	7.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,200	-- [b]	7.0	--	5.00E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	330	-- [b]	7.0	--	2.00E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	5,200	-- [b]	7.0	--	3.30E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	2,700	8.41E+06	7.0	1,201,336	3.30E-01	1,201,336	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	69	-- [b]	7.0	--	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Chloroform	67-66-3	µg/kg	9.0	1,289	7.0	184	5.00E-03	184	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,700	-- [b]	7.0	--	2.00E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,400	-- [b]	7.0	--	5.00E-03	--	Scaled GWP SSL	--

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a]	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
618-9_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,700	2.41E+08	7.0	34,499,842	1.00E+00	34,499,842	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	7,200	2.85E+07	7.0	4,071,915	3.30E-01	4,071,915	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	44	--[h]	7.0	--	1.65E-03	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachlorobutadiene	87-68-3	µg/kg	760	--[h]	7.0	--	3.30E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachloroethane	67-72-1	µg/kg	17,000	22,916	7.0	3,274	3.30E-01	3,274	Scaled GWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.49E+07	--[h]	7.0	--	5.00E+00	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,700	1.06E+07	7.0	1,509,135	5.00E-01	1,509,135	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	359,000	--[h]	7.0	--	2.50E+00	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	330	1.41E+06	7.0	201,218	2.50E+00	201,218	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2,300	2,098	7.0	300	5.00E-03	300	Scaled GWP SSL	Yes [m]
618-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	--[h]	7.0	--	4.00E+00	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	1.67E+06	1.36E+07	7.0	1,945,284	2.50E+00	1,945,284	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	920	16,996	7.0	2,428	5.00E-03	2,428	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Toluene	108-88-3	µg/kg	9.0	1.15E+06	7.0	164,992	5.00E-03	164,992	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	8,963	101,630[f]	7.0	101,630	---	101,630	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	1,334	7.0	191	5.00E-03	191	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,300	--[h]	7.0	--	2.50E+00	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,300	--[h]	7.0	--	1.00E+00	--	Scaled GWP SSL	-- [h]
618-9_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.071	--[d]	7.0	--	5.00E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	3.0	--[d]	7.0	--	1.00E+00	--	Scaled GWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	42	97,738	49.0	1,995	1.65E-02	1,995	Scaled GWP SSL	No [h]
628-4_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,115	91,112	49.0	1,859	1.65E-02	1,859	Scaled GWP SSL	No [h]
628-4_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	243	--[h]	49.0	--	1.65E-02	--	Scaled GWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	38	--[h]	49.0	--	1.65E-02	--	Scaled GWP SSL	--
628-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,864	20,000[g]	49.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
628-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	99,167	1.06E+07	49.0	215,591	5.00E-01	215,591	Scaled GWP SSL	No [h]
628-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,163	101,630[f]	49.0	101,630	---	101,630	Scaled GWP SSL	No
628-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	49.0	--	---	--	Scaled GWP SSL	--
628-4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.11	--[d]	49.0	--	5.00E-01	--	Scaled GWP SSL	--
628-4_Shallow	Rad	Uranium-238	U-238	pCi/g	1.0	--[d]	49.0	--	1.00E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	117	3.69E+07	8.0	4,610,204	1.00E-01	4,610,204	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.34E+06	--[h]	8.0	--	5.00E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	7.0	--[h]	8.0	--	5.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	359	270,034	8.0	33,754	6.00E-01	33,754	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,970	91,112	8.0	11,389	1.65E-02	11,389	Scaled GWP SSL	No [h]
UPR-300-17_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	450	--[h]	8.0	--	1.65E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	113	--[h]	8.0	--	1.65E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,573	20,000[g]	8.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Barium	7440-39-3	µg/kg	81,014	--[h]	8.0	--	5.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	59	--[h]	8.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	44	--[h]	8.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	33	--[h]	8.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	9.9	--[h]	8.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	240	--[h]	8.0	--	2.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,903	1.08E+08	8.0	13,480,198	2.00E+00	13,480,198	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	173	3.52E+06	8.0	440,164	2.00E-01	440,164	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,795	--[h]	8.0	--	2.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	39	--[h]	8.0	--	1.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,688	--[h]	8.0	--	5.00E-03	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,135	2.41E+08	8.0	30,187,362	1.00E+00	30,187,362	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	35	--[h]	8.0	--	5.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.9	3.08E+07	8.0	3,854,796	3.00E-02	3,854,796	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	5.9	--[h]	8.0	--	3.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.90E+07	--[h]	8.0	--	5.00E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,240	1.06E+07	8.0	1,320,493	5.00E-01	1,320,493	Scaled GWP SSL	No [h]
UPR-300-17_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,159	--[h]	8.0	--	2.50E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	69	1.41E+06	8.0	176,066	2.50E+00	176,066	Scaled GWP SSL	No [h]

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot \frac{10 \cdot L \cdot \rho_b \cdot (\theta_w + K_d \cdot \rho_s)}{L}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
UPR-300-17_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	412	2.58E+07	8.0	3,228,384	2.00E+00	3,228,384	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	48	2.26E+06	8.0	282,286	2.00E+00	282,286	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	563,654	--[b]	8.0	--	4.00E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	34	--[b]	8.0	--	5.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Silver	7440-22-4	µg/kg	340	--[b]	8.0	--	2.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,950	2.00E+06[c]	8.0	2,000,000	---	2,000,000	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPH/OILH	µg/kg	210,420	2.00E+06[c]	8.0	2,000,000	---	2,000,000	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,420	101,630[c]	8.0	101,630	---	101,630	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	52,150	--[b]	8.0	--	2.50E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	157,172	--[b]	8.0	--	1.00E+00	--	Scaled GWP SSL	-- [b]
UPR-300-17_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	6.1	--[c]	8.0	--	---	--	Scaled GWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[c]	8.0	--	5.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-238	U-238	pCi/g	4.0	--[c]	8.0	--	1.00E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	13	3.69E+07	21.0	1,756,268	1.00E-01	1,756,268	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.80E+06	--[b]	21.0	--	5.00E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	381	270,034	21.0	12,859	6.00E-01	12,859	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	879	91,112	21.0	4,339	1.65E-02	4,339	Scaled GWP SSL	No [b]
UPR-300-46_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	490	--[b]	21.0	--	1.65E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	84	--[b]	21.0	--	1.65E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,846	20,000[d]	21.0	20,000	1.00E+00	20,000	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Barium	7440-39-3	µg/kg	82,137	--[b]	21.0	--	5.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.9	--[b]	21.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.4	--[b]	21.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.4	--[b]	21.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.8	--[b]	21.0	--	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	222	--[b]	21.0	--	2.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,714	1.08E+08	21.0	5,135,313	2.00E+00	5,135,313	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	95	3.52E+06	21.0	167,682	2.00E-01	167,682	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,173	--[b]	21.0	--	2.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	5.6	--[b]	21.0	--	1.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,361	--[b]	21.0	--	5.00E-03	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,151	2.41E+08	21.0	11,499,947	1.00E+00	11,499,947	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.3	--[b]	21.0	--	3.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	9.6	--[b]	21.0	--	5.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.2	3.08E+07	21.0	1,468,494	3.00E-02	1,468,494	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	7.6	--[b]	21.0	--	3.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07	--[b]	21.0	--	5.00E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,105	1.06E+07	21.0	503,045	5.00E-01	503,045	Scaled GWP SSL	No [b]
UPR-300-46_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	311,001	--[b]	21.0	--	2.50E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	29	1.41E+06	21.0	67,073	2.50E+00	67,073	Scaled GWP SSL	No [b]
UPR-300-46_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	456	2.58E+07	21.0	1,229,861	2.00E+00	1,229,861	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	36	2.26E+06	21.0	107,537	2.00E+00	107,537	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,230	--[b]	21.0	--	4.00E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	4.4	--[b]	21.0	--	5.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,897	101,630[c]	21.0	101,630	---	101,630	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	53,808	--[b]	21.0	--	2.50E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	47,945	--[b]	21.0	--	1.00E+00	--	Scaled GWP SSL	-- [b]
UPR-300-46_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.070	--[b]	21.0	--	1.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.8	--[c]	21.0	--	---	--	Scaled GWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[c]	21.0	--	5.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	--[c]	21.0	--	1.00E+00	--	Scaled GWP SSL	--

Notes:

a. ECF-300FF5-11-0153, 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.

b. 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.

c. Due to the complex geochemistry of uranium in 300 Area source operable unit soils, uranium SSLs were derived using a site-specific two-dimensional model as described in ECF-300FF5-11-0151. These values are derived from a 2-D model, and therefore these values are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

Table 7-1. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Without Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pE}{pg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction	STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection Scaled to Site Length in Direction of GW Flow	Required Detection Limit	Selected SSL Protective of Groundwater	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Groundwater?
							(m)	(µg/kg or pCi/g)[a]	(µg/kg or pCi/g)	(µg/kg or pCi/g)		

d. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and then summing to provide a mass-based total uranium exposure point concentration (identified as Total_U_Isotopes), as described in ECF-300NPL-11-0137, Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit. These values are derived from a 2-D model, and therefore are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

a. 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. For kerosene range, a soil screening level is not calculated because a surface water cleanup level or surface water standard is not available for the analyte.

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 Hanford Site cleanup value for arsenic is 20 mg/kg based on the letter known Associated with Establishing Soil Cleanup Levels for Arsenic published by the Department of Ecology Toxics Cleanup Program on June 11, 2013. This letter indicates that the Method A soil cleanup level of 20 mg/kg can be used to define natural background levels when developing

h. If current Kd values (ECF-Hanford-13-0023 Rev. 3) were applied to the analysis, these contaminants would have been assigned "NR" due to the Kd exceeding the Kd breakthrough threshold; if exceedance resulted from scaling for these analytes (aroclor-1242, aroclor-1248, lead, mercury, zinc) it was dismissed based on this consideration.

i. Exceeded GWP SSL, but eliminated through further evaluation; volatile mass limited.

j. Exceeded GWP SSL but eliminated through further consideration; laboratory contaminant.

k. Exceeded GWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1221 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

l. Exceeded GWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1232 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

m. Exceeded before dimensional reevaluation.

-- = Not applicable or no value

Exceedances of cleanup levels that are not eliminated under further consideration are highlighted in yellow.

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\frac{pCi}{kg}\cdot 10^{-3}\cdot 0.7\cdot 0.3\cdot \frac{1}{K}}{\frac{pCi}{L}}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300 ASH PITS_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	52	133	50.0	3	1.65E-02	3	Scaled SWP SSL	Yes [h]
300 ASH PITS_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,078	20,000[j]	50.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300 ASH PITS_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	96	--[h]	50.0	--	3.30E-01	--	Scaled SWP SSL	--
300 ASH PITS_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	76	1.50E+06	50.0	30,093	3.30E-01	30,093	Scaled SWP SSL	No
300 ASH PITS_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,450	2.64E+06[c]	50.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300 ASH PITS_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.039	--[d]	50.0	--	5.00E-01	--	Scaled SWP SSL	--
300 ASH PITS_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82	--[d]	50.0	--	1.00E+00	--	Scaled SWP SSL	--
300 VTS_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.029	--[h]	24.7	--	1.00E-01	--	Scaled SWP SSL	--
300-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	13,500	20,000[j]	38.6	20,000	1.00E+00	20,000	Scaled SWP SSL	No [m]
300-10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	200	--[h]	38.6	--	3.30E-01	--	Scaled SWP SSL	--
300-10_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	230	1.50E+06	38.6	38,980	3.30E-01	38,980	Scaled SWP SSL	No
300-10_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,078	2.64E+06[c]	38.6	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-10_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16	--[h]	38.6	--	1.00E-01	--	Scaled SWP SSL	--
300-10_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.041	--[d]	38.6	--	5.00E-01	--	Scaled SWP SSL	--
300-10_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	--[d]	38.6	--	1.00E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.62E+06	--[h]	1.0	--	5.00E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	122	--[h]	1.0	--	1.65E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	40	--[h]	1.0	--	1.65E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,420	20,000[j]	1.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-109_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	63,300	--[h]	1.0	--	5.00E-01	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.2	--[h]	1.0	--	1.50E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.3	--[h]	1.0	--	1.50E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	180	--[h]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	632	--[e]	1.0	--	2.00E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	59	176,066	1.0	176,066	2.00E-01	176,066	Scaled SWP SSL	No
300-109_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,950	--[h]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.8	--[h]	1.0	--	1.00E-01	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	6,420	--[h]	1.0	--	5.00E-03	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,800	3.40E+06	1.0	3,396,078	1.00E+00	3,396,078	Scaled SWP SSL	No
300-109_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	14	--[h]	1.0	--	3.00E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.75E+07	1.43E+08	1.0	143,047,849	5.00E+00	143,047,849	Scaled SWP SSL	No
300-109_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	2,890	1.48E+06	1.0	1,484,305	5.00E-01	1,484,305	Scaled SWP SSL	No [h]
300-109_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	278,000	--[h]	1.0	--	2.50E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	22	8,451	1.0	8,451	2.50E+00	8,451	Scaled SWP SSL	No [h]
300-109_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	341	--[h]	1.0	--	2.00E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,490	--[h]	1.0	--	4.00E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1.6	--[h]	1.0	--	5.00E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,108	2.64E+06[c]	1.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-109_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	47,600	--[e]	1.0	--	2.50E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	34,700	6.41E+07	1.0	64,132,802	1.00E+00	64,132,802	Scaled SWP SSL	No [h]
300-109_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	1.0	--	---	--	Scaled SWP SSL	--
300-109_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	--[d]	1.0	--	1.00E+00	--	Scaled SWP SSL	--
300-18_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	20,000[j]	13.5	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-18_Shallow	non-Rad	Barium	7440-39-3	µg/kg	63,400	--[h]	13.5	--	5.00E-01	--	Scaled SWP SSL	--
300-18_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	650	--[h]	13.5	--	2.00E-01	--	Scaled SWP SSL	--
300-18_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	40	176,066	13.5	13,042	2.00E-01	13,042	Scaled SWP SSL	No
300-18_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	6,900	--[h]	13.5	--	2.00E-01	--	Scaled SWP SSL	--
300-18_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,600	1.48E+06	13.5	109,949	5.00E-01	109,949	Scaled SWP SSL	No [h]
300-18_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,136	2.64E+06[c]	13.5	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-18_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.65	--[d]	13.5	--	---	--	Scaled SWP SSL	--
300-18_Shallow	Rad	Uranium-238	U-238	pCi/g	0.41	--[d]	13.5	--	1.00E+00	--	Scaled SWP SSL	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	120,000	--[e]	1.0	--	---	--	Scaled SWP SSL	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPH/OILH	µg/kg	230,000	--[e]	1.0	--	---	--	Scaled SWP SSL	--
300-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPH/OILH	µg/kg	52,000	--[e]	5.0	--	---	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	5.99E+06	--[h]	58.3	--	5.00E+00	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	322	252,032	58.3	4,323	6.00E-01	4,323	Scaled SWP SSL	No
300-259_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,096	20,000[j]	58.3	20,000	1.00E+00	20,000	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{mg}{kg} \cdot m \cdot \frac{pCi}{L} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-259_Shallow	non-Rad	Barium	7440-39-3	µg/kg	75,232	--[b]	58.3	--	5.00E-01	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	226	--[b]	58.3	--	2.00E-01	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,303	--[e]	58.3	--	2.00E+00	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	252	176,066	58.3	3,020	2.00E-01	3,020	Scaled SWP SSL	No
300-259_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,901	--[b]	58.3	--	2.00E-01	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	5,831	--[b]	58.3	--	5.00E-03	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Copper	7440-50-8	µg/kg	10,692	3.40E+06	58.3	58,252	1.00E+00	58,252	Scaled SWP SSL	No
300-259_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07	1.43E+08	58.3	2,453,651	5.00E+00	2,453,651	Scaled SWP SSL	Yes
300-259_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,625	1.48E+06	58.3	25,460	5.00E-01	25,460	Scaled SWP SSL	No [h]
300-259_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	318,874	--[b]	58.3	--	2.50E+00	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	10	8,451	58.3	145	2.50E+00	145	Scaled SWP SSL	No [h]
300-259_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	303	--[b]	58.3	--	2.00E+00	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,751	--[b]	58.3	--	4.00E+00	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,876	2.64E+06[f]	58.3	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-259_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	42,626	--[b]	58.3	--	3.50E+00	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	479,584	6.41E+07	58.3	1,100,048	1.00E+00	1,100,048	Scaled SWP SSL	No [h]
300-259_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.6	--[d]	58.3	--	---	--	Scaled SWP SSL	--
300-259_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	--[d]	58.3	--	1.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.17E+06	--[b]	33.0	--	5.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	922	252,032	33.0	7,637	6.00E-01	7,637	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,160	20,000[g]	33.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	122,000	--[b]	33.0	--	5.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	239	--[b]	33.0	--	2.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,360	--[e]	33.0	--	2.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	110	176,066	33.0	5,335	2.00E-01	5,335	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,890	--[b]	33.0	--	2.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	7,430	--[b]	33.0	--	5.00E-03	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	73,300	3.40E+06	33.0	102,911	1.00E+00	102,911	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.04E+07	1.43E+08	33.0	4,334,783	5.00E+00	4,334,783	Scaled SWP SSL	Yes
300-260_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	18,300	1.48E+06	33.0	44,979	5.00E-01	44,979	Scaled SWP SSL	No [h]
300-260_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	328,000	--[b]	33.0	--	2.50E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	12	8,451	33.0	256	2.50E+00	256	Scaled SWP SSL	No [h]
300-260_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	537	--[b]	33.0	--	2.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,200	--[b]	33.0	--	4.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	206	--[b]	33.0	--	2.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,800	2.64E+06[f]	33.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,000	--[e]	33.0	--	2.50E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	77,400	6.41E+07	33.0	1,943,418	3.00E+00	1,943,418	Scaled SWP SSL	No [h]
300-260_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.25	--[d]	33.0	--	5.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	4.3	--[d]	33.0	--	1.00E+00	--	Scaled SWP SSL	--
300-272_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	43,100	--[e]	1.0	--	---	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	960	4.94E+07	43.0	1,148,605	1.00E-01	1,148,605	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.61E+06	--[b]	43.0	--	5.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	260	252,032	43.0	5,861	6.00E-01	5,861	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	2,211	20,000[g]	43.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	75,261	--[b]	43.0	--	5.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.3	--[b]	43.0	--	1.50E-02	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.9	--[b]	43.0	--	1.50E-02	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	452	--[b]	43.0	--	2.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Boron	7440-42-8	µg/kg	1,466	--[e]	43.0	--	2.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	83	176,066	43.0	4,095	2.00E-01	4,095	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	8,022	--[b]	43.0	--	2.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	2.2	--[b]	43.0	--	1.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	5,847	--[b]	43.0	--	5.00E-03	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	42,923	3.40E+06	43.0	78,979	1.00E+00	78,979	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	2,300	2.82E+08	43.0	6,552,014	5.00E-02	6,552,014	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	81	1.06E+08	43.0	2,465,277	3.00E-02	2,465,277	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{mg}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-275_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07	1.43E+08	43.0	3,326,694	5.00E+00	3,326,694	Scaled SWP SSL	Yes
300-275_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	7,189	1.48E+06	43.0	34,519	5.00E-01	34,519	Scaled SWP SSL	No [h]
300-275_Shallow_1	non-Rad	Lithium	7439-93-2	µg/kg	6,686	--[e]	43.0	--	2.50E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	276,815	--[b]	43.0	--	2.50E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	17	8,451	43.0	197	2.50E+00	197	Scaled SWP SSL	No [h]
300-275_Shallow_1	non-Rad	Molybdenum	7439-98-7	µg/kg	378	--[b]	43.0	--	2.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	9,461	--[b]	43.0	--	4.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Silver	7440-22-4	µg/kg	121	--[b]	43.0	--	2.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Strontium	7440-24-6	µg/kg	20,196	--[b]	43.0	--	1.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,483	--[b]	43.0	--	1.00E+01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,251	2.64E+06[f]	43.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	45,128	--[e]	43.0	--	2.50E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	41,014	6.41E+07	43.0	1,491,461	1.00E+00	1,491,461	Scaled SWP SSL	No [h]
300-275_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.046	--[b]	43.0	--	1.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	7.7	--[d]	43.0	--	---	--	Scaled SWP SSL	--
300-275_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.0	--[d]	43.0	--	5.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	Rad	Uranium-238	U-238	pCi/g	7.4	--[d]	43.0	--	1.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	3.6	4.94E+07	7.9	6,251,899	1.00E-01	6,251,899	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	6.24E+06	--[b]	7.9	--	5.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,761	20,000[g]	7.9	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	68,607	--[b]	7.9	--	5.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	254	--[b]	7.9	--	2.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Boron	7440-42-8	µg/kg	1,147	--[e]	7.9	--	2.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Cadmium	7440-43-9	µg/kg	144	176,066	7.9	22,287	2.00E-01	22,287	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	8,994	--[b]	7.9	--	2.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	5,977	--[b]	7.9	--	5.00E-03	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	11,596	3.40E+06	7.9	429,883	1.00E+00	429,883	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	56	2.82E+08	7.9	35,662,861	5.00E-02	35,662,861	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	2.6	1.06E+08	7.9	13,418,595	3.00E-02	13,418,595	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07	1.43E+08	7.9	18,107,323	5.00E+00	18,107,323	Scaled SWP SSL	Yes
300-275_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	4,099	1.48E+06	7.9	187,887	5.00E-01	187,887	Scaled SWP SSL	No [h]
300-275_Shallow_2	non-Rad	Lithium	7439-93-2	µg/kg	7,067	--[e]	7.9	--	2.50E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	292,731	--[b]	7.9	--	2.50E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	28	8,451	7.9	1,070	2.50E+00	1,070	Scaled SWP SSL	No [h]
300-275_Shallow_2	non-Rad	Molybdenum	7439-98-7	µg/kg	404	--[b]	7.9	--	2.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	9,593	--[b]	7.9	--	4.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	27,081	--[b]	7.9	--	1.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,149	--[b]	7.9	--	1.00E+01	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,725	2.64E+06[f]	7.9	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	51,632	--[e]	7.9	--	2.50E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	41,245	6.41E+07	7.9	8,118,076	1.00E+00	8,118,076	Scaled SWP SSL	No [h]
300-275_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[d]	7.9	--	---	--	Scaled SWP SSL	--
300-275_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	7.9	--	5.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_2	Rad	Uranium-238	U-238	pCi/g	1.2	--[d]	7.9	--	1.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.32E+06	--[b]	117.4	--	5.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1016	12674-11-2	µg/kg	10	--[b]	117.4	--	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	16	143	117.4	1	1.65E-02	1	Scaled SWP SSL	Yes [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	190	133	117.4	1	1.65E-02	1	Scaled SWP SSL	Yes [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	84	--[b]	117.4	--	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	--[b]	117.4	--	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,638	20,000[g]	117.4	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Barium	7440-39-3	µg/kg	72,411	--[b]	117.4	--	5.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	256	--[b]	117.4	--	2.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,484	--[e]	117.4	--	2.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	228	1.50E+06	117.4	12,816	3.30E-01	12,816	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	94	176,066	117.4	1,500	2.00E-01	1,500	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	8,781	--[b]	117.4	--	2.00E-01	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-33, 300-41, 300-256_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,273	--[b]	117.4	--	5.00E-03	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,662	3.40E+06	117.4	28,927	1.00E+00	28,927	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	1,651	--[b]	117.4	--	5.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.00E+07	1.43E+08	117.4	1,218,465	5.00E+00	1,218,465	Scaled SWP SSL	Yes
300-33, 300-41, 300-256_Shallow	non-Rad	Lead	7439-92-1	µg/kg	4,268	1.48E+06	117.4	12,643	5.00E-01	12,643	Scaled SWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	5,495	--[c]	117.4	--	2.50E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	314,762	--[b]	117.4	--	2.50E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	16	8,451	117.4	72	2.50E+00	72	Scaled SWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	2.9	1,931	117.4	16	5.00E-03	16	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	486	--[b]	117.4	--	2.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,880	--[b]	117.4	--	4.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	8,617	1.36E+07	117.4	115,988	2.50E+00	115,988	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Silver	7440-22-4	µg/kg	782	--[b]	117.4	--	2.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,349	2.64E+06[c]	117.4	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	52,694	--[c]	117.4	--	2.50E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,462	6.41E+07	117.4	546,276	1.00E+00	546,276	Scaled SWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.1	--[d]	117.4	--	---	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.34	--[d]	117.4	--	5.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-238	U-238	pCi/g	2.1	--[d]	117.4	--	1.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.51E+06	--[b]	68.5	--	5.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	330	133	68.5	2	1.65E-02	2	Scaled SWP SSL	Yes [no]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	385	--[b]	68.5	--	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[b]	68.5	--	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,240	20,000[f]	68.5	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	64,600	--[b]	68.5	--	5.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	169	--[b]	68.5	--	2.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,030	--[c]	68.5	--	2.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	100	176,066	68.5	2,570	2.00E-01	2,570	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,080	--[b]	68.5	--	2.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,640	--[b]	68.5	--	5.00E-03	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,400	3.40E+06	68.5	49,578	1.00E+00	49,578	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	1,300	--[b]	68.5	--	5.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.86E+07	1.43E+08	68.5	2,088,290	5.00E+00	2,088,290	Scaled SWP SSL	Yes
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	3,160	1.48E+06	68.5	21,669	5.00E-01	21,669	Scaled SWP SSL	No [h]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	6,580	--[c]	68.5	--	2.50E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	259,000	--[b]	68.5	--	2.50E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2	1,931	68.5	28	5.00E-03	28	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	275	--[b]	68.5	--	2.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,040	--[b]	68.5	--	4.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	17,900	1.36E+07	68.5	198,788	2.50E+00	198,788	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,460	2.64E+06[c]	68.5	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	51,400	--[c]	68.5	--	2.50E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	38,900	6.41E+07	68.5	936,245	1.00E+00	936,245	Scaled SWP SSL	No [h]
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	3.0	--[d]	68.5	--	---	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	2.2	--[d]	68.5	--	1.00E+00	--	Scaled SWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	100	--[b]	1.0	--	1.65E-02	--	Scaled SWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,200	--[b]	1.0	--	1.65E-02	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.71E+06	--[b]	1.0	--	5.00E+00	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	4,100	252,032	1.0	252,032	6.00E-01	252,032	Scaled SWP SSL	No
300-44_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	16,900	20,000[f]	1.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No [m]
300-44_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	75,200	--[b]	1.0	--	5.00E-01	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	480	--[b]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,300	--[b]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,200	--[b]	1.0	--	5.00E-03	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	7,800	3.40E+06	1.0	3,396,078	1.00E+00	3,396,078	Scaled SWP SSL	No
300-44_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.94E+07	1.43E+08	1.0	143,047,849	5.00E+00	143,047,849	Scaled SWP SSL	No
300-44_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	303,000	--[b]	1.0	--	2.50E+00	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-44_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	8,600	--[b]	1.0	--	4.00E+00	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	872	2.64E+06[c]	1.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-44_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	43,200	--[e]	1.0	--	2.50E+00	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,800	6.41E+07	1.0	64,132,802	1.00E+00	64,132,802	Scaled SWP SSL	No [h]
300-44_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.29	--[d]	1.0	--	1.00E+00	--	Scaled SWP SSL	--
300-45_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	86	--[b]	5.0	--	1.65E-02	--	Scaled SWP SSL	--
300-45_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	290	--[b]	5.0	--	3.30E-01	--	Scaled SWP SSL	--
300-45_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,600	2.64E+06[c]	5.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-45_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.023	--[b]	5.0	--	1.00E-01	--	Scaled SWP SSL	--
300-45_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.061	--[d]	5.0	--	5.00E-01	--	Scaled SWP SSL	--
300-45_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	--[d]	5.0	--	1.00E+00	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	1,2,4-Trichlorobenzene	120-82-1	µg/kg	31	37,238	5.0	7,448	5.00E-03	7,448	Scaled SWP SSL	No
300-49_Overburden	non-Rad	1,4-Dichlorobenzene	106-46-7	µg/kg	29	164,520	5.0	32,904	5.00E-03	32,904	Scaled SWP SSL	No
300-49_Overburden	non-Rad	2,4-Dinitrotoluene	121-14-2	µg/kg	19	330	5.0	7	3.30E-01	7	Scaled SWP SSL	Yes [i]
300-49_Overburden	non-Rad	2-Chlorophenol	95-57-8	µg/kg	51	393,603	5.0	78,721	3.30E-01	78,721	Scaled SWP SSL	No
300-49_Overburden	non-Rad	4-Chloro-3-methylphenol	59-50-7	µg/kg	46	1.87E+08	5.0	37,302,525	3.30E-01	37,302,525	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Acenaphthene	83-32-9	µg/kg	31	4.94E+07	5.0	9,878,000	1.00E-01	9,878,000	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Aluminum	7429-90-5	µg/kg	6.30E+06	--[b]	5.0	--	5.00E+00	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Antimony	7440-36-0	µg/kg	232	252,032	5.0	50,406	6.00E-01	50,406	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,008	--[b]	5.0	--	1.65E-02	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Arsenic	7440-38-2	µg/kg	3,291	20,000[f]	5.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Barium	7440-39-3	µg/kg	76,068	--[b]	5.0	--	5.00E-01	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Beryllium	7440-41-7	µg/kg	201	--[b]	5.0	--	2.00E-01	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Cadmium	7440-43-9	µg/kg	174	176,066	5.0	35,213	2.00E-01	35,213	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Chromium	7440-47-3	µg/kg	18,106	--[b]	5.0	--	2.00E-01	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Cobalt	7440-48-4	µg/kg	7,127	--[b]	5.0	--	5.00E-03	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Copper	7440-50-8	µg/kg	536,000	3.40E+06	5.0	679,216	1.00E+00	679,216	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	52	3.56E+07	5.0	7,125,851	3.30E-01	7,125,851	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Iron	7439-89-6	µg/kg	2.08E+07	1.43E+08	5.0	28,609,570	5.00E+00	28,609,570	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Lead	7439-92-1	µg/kg	36,964	1.48E+06	5.0	296,861	5.00E-01	296,861	Scaled SWP SSL	No [h]
300-49_Overburden	non-Rad	Manganese	7439-96-5	µg/kg	316,669	--[b]	5.0	--	2.50E+00	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Nickel	7440-02-0	µg/kg	13,015	--[b]	5.0	--	4.00E+00	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	n-Nitrosodi-n-dipropylamine	621-64-7	µg/kg	40	330	5.0	7	---	7	Scaled SWP SSL	Yes [i]
300-49_Overburden	non-Rad	Pentachlorophenol	87-86-5	µg/kg	50	1,980	5.0	396	3.30E-01	396	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Phenol	108-95-2	µg/kg	50	6.21E+06	5.0	1,242,808	3.30E-01	1,242,808	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Pyrene	129-00-0	µg/kg	40	--[b]	5.0	--	5.00E-02	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Silver	7440-22-4	µg/kg	703	--[b]	5.0	--	2.00E-01	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,066	2.64E+06[c]	5.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-49_Overburden	non-Rad	Vanadium	7440-62-2	µg/kg	50,380	--[e]	5.0	--	2.50E+00	--	Scaled SWP SSL	--
300-49_Overburden	non-Rad	Zinc	7440-66-6	µg/kg	141,984	6.41E+07	5.0	12,826,560	1.00E+00	12,826,560	Scaled SWP SSL	No [h]
300-49_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	1.0	--[d]	5.0	--	---	--	Scaled SWP SSL	--
300-49_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	0.057	--[d]	5.0	--	5.00E-01	--	Scaled SWP SSL	--
300-49_Overburden	Rad	Uranium-238	U-238	pCi/g	1.0	--[d]	5.0	--	1.00E+00	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.92E+06	--[b]	75.0	--	5.00E+00	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	176	252,032	75.0	3,360	6.00E-01	3,360	Scaled SWP SSL	No
300-49_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,431	20,000[f]	75.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-49_Shallow	non-Rad	Barium	7440-39-3	µg/kg	89,874	--[b]	75.0	--	5.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	303	--[b]	75.0	--	2.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,170	--[b]	75.0	--	2.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,323	--[b]	75.0	--	5.00E-03	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Copper	7440-50-8	µg/kg	14,870	3.40E+06	75.0	45,281	1.00E+00	45,281	Scaled SWP SSL	No
300-49_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.59E+07	1.43E+08	75.0	1,907,305	5.00E+00	1,907,305	Scaled SWP SSL	Yes
300-49_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,629	1.48E+06	75.0	19,791	5.00E-01	19,791	Scaled SWP SSL	No [h]
300-49_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	361,805	--[b]	75.0	--	2.50E+00	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	10,664	--[b]	75.0	--	4.00E+00	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Silver	7440-22-4	µg/kg	621	--[b]	75.0	--	2.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,983	2.64E+06[c]	75.0	2,640,000	---	2,640,000	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-49_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	58,672	--[e]	75.0	--	2.50E+00	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	54,651	6.41E+07	75.0	855,104	1.00E+00	855,104	Scaled SWP SSL	No [b]
300-49_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.15	--[b]	75.0	--	1.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[d]	75.0	--	---	--	Scaled SWP SSL	--
300-49_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	75.0	--	5.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	--[d]	75.0	--	1.00E+00	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.88E+06	--[b]	50.0	--	5.00E+00	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	3,000	252,032	50.0	5,041	6.00E-01	5,041	Scaled SWP SSL	No
300-50_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	126	--[b]	50.0	--	1.65E-02	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,403	20,000[f]	50.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
300-50_Shallow	non-Rad	Barium	7440-39-3	µg/kg	103,029	--[b]	50.0	--	5.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	282	--[b]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	19	--[b]	50.0	--	3.30E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	463	176,066	50.0	3,521	2.00E-01	3,521	Scaled SWP SSL	No
300-50_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	16,841	--[b]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	9,109	--[b]	50.0	--	5.00E-03	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Copper	7440-50-8	µg/kg	16,820	3.40E+06	50.0	67,922	1.00E+00	67,922	Scaled SWP SSL	No
300-50_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.96E+07	1.43E+08	50.0	2,860,957	5.00E+00	2,860,957	Scaled SWP SSL	Yes
300-50_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,381	1.48E+06	50.0	29,686	5.00E-01	29,686	Scaled SWP SSL	No [b]
300-50_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	318,120	--[b]	50.0	--	2.50E+00	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,413	--[b]	50.0	--	4.00E+00	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Silver	7440-22-4	µg/kg	2,992	--[b]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,938	2.64E+06[f]	50.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-50_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,964	--[e]	50.0	--	2.50E+00	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,344	6.41E+07	50.0	1,282,656	1.00E+00	1,282,656	Scaled SWP SSL	No [b]
300-50_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.056	--[b]	50.0	--	1.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	7.9	--[d]	50.0	--	---	--	Scaled SWP SSL	--
300-50_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.66	--[d]	50.0	--	5.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	Rad	Uranium-238	U-238	pCi/g	8.4	--[d]	50.0	--	1.00E+00	--	Scaled SWP SSL	--
300-8_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	574	--[b]	136.7	--	2.00E-01	--	Scaled SWP SSL	--
300-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,374	2.64E+06[f]	136.7	2,640,000	---	2,640,000	Scaled SWP SSL	No
300-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.79	--[d]	136.7	--	---	--	Scaled SWP SSL	--
300-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82	--[d]	136.7	--	1.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_1	non-Rad	Aroclor-1248	12672-29-6	µg/kg	3,000	133	60.0	2	1.65E-02	2	Scaled SWP SSL	Yes [bm]
316-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	19,014	20,000[f]	60.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No [m]
316-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	69	--[b]	60.0	--	3.30E-01	--	Scaled SWP SSL	--
316-1_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	98	1.50E+06	60.0	25,077	3.30E-01	25,077	Scaled SWP SSL	No
316-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	83,027	2.64E+06[f]	60.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.032	--[b]	60.0	--	1.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.2	--[d]	60.0	--	5.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	28	--[d]	60.0	--	1.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	1.11E+07	--[b]	50.0	--	5.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	490	252,032	50.0	5,041	6.00E-01	5,041	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	98	--[b]	50.0	--	1.65E-02	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	5,138	20,000[f]	50.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	129,106	--[b]	50.0	--	5.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	416	--[b]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	342	--[b]	50.0	--	3.30E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	474	176,066	50.0	3,521	2.00E-01	3,521	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	50,455	--[b]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	9,703	--[b]	50.0	--	5.00E-03	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	1.37E+06	3.40E+06	50.0	67,922	1.00E+00	67,922	Scaled SWP SSL	Yes
316-1_Shallow_3	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	3.2	--[b]	50.0	--	1.65E-03	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.44E+07	1.43E+08	50.0	2,860,957	5.00E+00	2,860,957	Scaled SWP SSL	Yes
316-1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	14,409	1.48E+06	50.0	29,686	5.00E-01	29,686	Scaled SWP SSL	No [b]
316-1_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	392,825	--[b]	50.0	--	2.50E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	1,105	8,451	50.0	169	2.50E+00	169	Scaled SWP SSL	Yes [b]

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\frac{DF}{DF}}{\frac{DF}{DF}} \cdot \frac{\frac{DF}{DF}}{2} \cdot \frac{\frac{DF}{DF}}{2}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
316-1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	94,656	--[b]	50.0	--	4.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Phenol	108-95-2	µg/kg	28	6.21E+06	50.0	124,281	3.30E-01	124,281	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Selenium	7782-49-2	µg/kg	1,444	302,457	50.0	6,049	1.00E+00	6,049	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Silver	7440-22-4	µg/kg	13,196	--[b]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	63,074	2.64E+06[c]	50.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	56,707	--[d]	50.0	--	2.50E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	82,016	6.41E+07	50.0	1,282,656	1.00E+00	1,282,656	Scaled SWP SSL	No [h]
316-1_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.37	--[b]	50.0	--	1.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Cobalt-60	10198-40-0	pCi/g	2.3	--[b]	50.0	--	5.00E-03	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	23	--[d]	50.0	--	---	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	2.6	--[d]	50.0	--	5.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Uranium-238	U-238	pCi/g	21	--[d]	50.0	--	1.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	µg/kg	62	--[b]	30.0	--	1.65E-02	--	Scaled SWP SSL	--
316-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	42,963	2.64E+06[c]	30.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-1_Shallow_4	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[b]	30.0	--	5.00E-03	--	Scaled SWP SSL	--
316-1_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	16	--[d]	30.0	--	---	--	Scaled SWP SSL	--
316-1_Shallow_4	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[d]	30.0	--	5.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_4	Rad	Uranium-238	U-238	pCi/g	14	--[d]	30.0	--	1.00E+00	--	Scaled SWP SSL	--
316-2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	210,452	2.64E+06[c]	71.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-2_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.031	--[b]	71.0	--	1.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.092	--[b]	71.0	--	5.00E-03	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	86	--[d]	71.0	--	---	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	12	--[d]	71.0	--	5.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	69	--[d]	71.0	--	1.00E+00	--	Scaled SWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	µg/kg	697	133	117.0	1	1.65E-02	1	Scaled SWP SSL	Yes [h]
316-2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	42	--[b]	117.0	--	1.65E-02	--	Scaled SWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	110	--[b]	117.0	--	1.65E-02	--	Scaled SWP SSL	--
316-2_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	291,369	2.64E+06[c]	117.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-2_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.45	--[b]	117.0	--	1.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.45	--[b]	117.0	--	5.00E-03	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	115	--[d]	117.0	--	---	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	11	--[d]	117.0	--	5.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Uranium-238	U-238	pCi/g	96	--[d]	117.0	--	1.00E+00	--	Scaled SWP SSL	--
316-2_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	8,000	20,000[g]	167.5	20,000	1.00E+00	20,000	Scaled SWP SSL	No
316-2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	260	--[b]	167.5	--	3.30E-01	--	Scaled SWP SSL	--
316-2_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	180	1.50E+06	167.5	8,983	3.30E-01	8,983	Scaled SWP SSL	No
316-2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	73,174	2.64E+06[c]	167.5	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-2_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[d]	167.5	--	5.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	24	--[d]	167.5	--	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	3,070	20,000[g]	68.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
316-5_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	38	--[b]	68.0	--	1.50E-02	--	Scaled SWP SSL	--
316-5_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	146	--[b]	68.0	--	3.30E-01	--	Scaled SWP SSL	--
316-5_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	100	1.50E+06	68.0	22,127	3.30E-01	22,127	Scaled SWP SSL	No
316-5_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	271,835	2.64E+06[c]	68.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-5_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.48	--[b]	68.0	--	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	2.3	--[b]	68.0	--	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	19	--[d]	68.0	--	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_1	Rad	Uranium-238	U-238	pCi/g	89	--[d]	68.0	--	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	140	210	68.0	3	5.00E-03	3	Scaled SWP SSL	Yes [i]
316-5_Shallow_2	non-Rad	2-Butoxyethanol	111-76-2	µg/kg	240	2.58E+07	68.0	379,013	3.30E-01	379,013	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	3,180	20,000[g]	68.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	76,700	--[b]	68.0	--	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	180	--[b]	68.0	--	3.30E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	110	1.50E+06	68.0	22,127	3.30E-01	22,127	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,900	--[b]	68.0	--	2.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	38	--[b]	68.0	--	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	146	3.56E+07	68.0	523,960	3.30E-01	523,960	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot \frac{\frac{pCi}{L}}{\frac{\mu g}{L}}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
316-5_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	3,200	1.48E+06	68.0	21,828	5.00E-01	21,828	Scaled SWP SSL	No [h]
316-5_Shallow_2	non-Rad	Selenium	7782-49-2	µg/kg	490	302,457	68.0	4,448	1.00E+00	4,448	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Silver	7440-22-4	µg/kg	3,600	--[b]	68.0	--	2.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	204,701	2.64E+06[f]	68.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-5_Shallow_2	Rad	Americium-241	14596-10-2	pCi/g	0.12	--[b]	68.0	--	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	1.7	--[b]	68.0	--	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[b]	68.0	--	5.00E-03	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	9.0	--[e]	68.0	--	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Uranium-238	U-238	pCi/g	68	--[e]	68.0	--	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	57	133	68.0	2	1.65E-02	2	Scaled SWP SSL	Yes [h]
316-5_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	70	--[b]	68.0	--	1.65E-02	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[b]	68.0	--	1.65E-02	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,300	20,000[d]	68.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
316-5_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	190	--[b]	68.0	--	3.30E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	1,500	3.56E+07	68.0	523,960	3.30E-01	523,960	Scaled SWP SSL	No
316-5_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	138,095	2.64E+06[f]	68.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
316-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	--[b]	68.0	--	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.072	--[b]	68.0	--	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	7.7	--[e]	68.0	--	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	45	--[e]	68.0	--	1.00E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	25	--[b]	1.0	--	3.30E-01	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	590	2.28E+08	1.0	22,848,418	2.00E-02	22,848,418	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	0.56	148	1.0	148	1.65E-03	148	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	0.39	53	1.0	53	1.65E-03	53	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	6.90E+06	--[b]	1.0	--	5.00E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	360	252,032	1.0	252,032	6.00E-01	252,032	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	850	--[b]	1.0	--	1.65E-02	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,400	20,000[d]	1.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	78,600	--[b]	1.0	--	5.00E-01	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	570	--[b]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	910	--[b]	1.0	--	3.30E-01	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	1,700	--[g]	1.0	--	2.00E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	340	1.50E+06	1.0	1,504,626	3.30E-01	1,504,626	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	140	176,066	1.0	176,066	2.00E-01	176,066	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,300	--[b]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	1.0	--	5.00E-03	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	15,400	3.40E+06	1.0	3,396,078	1.00E+00	3,396,078	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	13	26	1.0	26	3.30E-03	26	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	98	3.56E+07	1.0	35,629,256	3.30E-01	35,629,256	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	1.9	1,433	1.0	1,433	1.65E-03	1,433	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan II	33213-65-9	µg/kg	3.1	1,433	1.0	1,433	3.30E-03	1,433	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.20E+07	1.43E+08	1.0	143,047,849	5.00E+00	143,047,849	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	9,000	1.48E+06	1.0	1,484,305	5.00E-01	1,484,305	Scaled SWP SSL	No [h]
331 LSLDF_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	349,000	--[b]	1.0	--	2.50E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	110	8,451	1.0	8,451	2.50E+00	8,451	Scaled SWP SSL	No [h]
331 LSLDF_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	3.3	--[b]	1.0	--	1.65E-02	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	11	1,931	1.0	1,931	5.00E-03	1,931	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	590	--[b]	1.0	--	2.00E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,000	--[b]	1.0	--	4.00E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	41,700	1.36E+07	1.0	13,616,986	2.50E+00	13,616,986	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	9,500	3.03E+06	1.0	3,025,997	---	3,025,997	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,100	--[b]	1.0	--	2.00E-01	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,402	2.64E+06[f]	1.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	53,100	--[g]	1.0	--	2.50E+00	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	6.41E+07	1.0	64,132,802	1.00E+00	64,132,802	Scaled SWP SSL	No [h]
331 LSLDF_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	--[e]	1.0	--	---	--	Scaled SWP SSL	--
331 LSLDF_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.47	--[e]	1.0	--	1.00E+00	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\frac{mg}{L}}{\frac{mg}{kg}} \cdot \frac{1\ m^3}{1000\ L} \cdot \frac{1000\ kg}{m^3}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
600-243_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	279	4.65E+06	40.3	115,330	3.30E-01	115,330	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	31	--[b]	40.3	--	5.00E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,300	252,032	40.3	6,254	6.00E-01	6,254	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	27	--[b]	40.3	--	1.65E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	18	--[b]	40.3	--	1.65E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	6,159	20,000[d]	40.3	20,000	1.00E+00	20,000	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Barium	7440-39-3	µg/kg	292,072	--[b]	40.3	--	5.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	43	--[b]	40.3	--	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	43	--[b]	40.3	--	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	46	--[b]	40.3	--	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32	--[b]	40.3	--	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	2,079	--[b]	40.3	--	2.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	432	--[b]	40.3	--	3.30E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Boron	7440-42-8	µg/kg	294,463	--[e]	40.3	--	2.00E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	793	176,066	40.3	4,369	2.00E-01	4,369	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	18,006	--[b]	40.3	--	2.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	63	--[b]	40.3	--	1.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,207	--[b]	40.3	--	5.00E-03	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Copper	7440-50-8	µg/kg	53,981	3.40E+06	40.3	84,270	1.00E+00	84,270	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	78	246,969	40.3	6,128	3.30E-01	6,128	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	37	3.56E+07	40.3	884,101	3.30E-01	884,101	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	79	2.82E+08	40.3	6,990,983	5.00E-02	6,990,983	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	28	--[b]	40.3	--	3.00E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Lead	7439-92-1	µg/kg	40,139	1.48E+06	40.3	36,831	5.00E-01	36,831	Scaled SWP SSL	Yes [h]
600-243_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	208,289	--[b]	40.3	--	2.50E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,869	--[b]	40.3	--	2.00E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	204	6.97E+07	40.3	1,729,533	2.00E+00	1,729,533	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	21,395	--[b]	40.3	--	4.00E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	70	--[b]	40.3	--	5.00E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	5,709	302,457	40.3	7,505	1.00E+00	7,505	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Silver	7440-22-4	µg/kg	500	--[b]	40.3	--	2.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	95,319	--[e]	40.3	--	---	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high bo	TPH/OILH	µg/kg	334,524	--[e]	40.3	--	---	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	46,986	--[e]	40.3	--	2.50E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	84,099	6.41E+07	40.3	1,591,385	1.00E+00	1,591,385	Scaled SWP SSL	No [h]
600-259_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.068	--[b]	17.0	--	1.00E-01	--	Scaled SWP SSL	--
600-259_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.038	--[b]	17.0	--	1.00E-01	--	Scaled SWP SSL	--
600-47_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,300	20,000[d]	22.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
600-47_Shallow	non-Rad	Barium	7440-39-3	µg/kg	67,000	--[b]	22.0	--	5.00E-01	--	Scaled SWP SSL	--
600-47_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	500	--[b]	22.0	--	2.00E-01	--	Scaled SWP SSL	--
600-47_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	90	176,066	22.0	8,003	2.00E-01	8,003	Scaled SWP SSL	No
600-47_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	5,500	--[b]	22.0	--	2.00E-01	--	Scaled SWP SSL	--
600-47_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,500	1.48E+06	22.0	67,468	5.00E-01	67,468	Scaled SWP SSL	No [h]
600-47_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,303	2.64E+06[f]	22.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
600-47_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	22.0	--	---	--	Scaled SWP SSL	--
600-47_Shallow	Rad	Uranium-238	U-238	pCi/g	1.6	--[d]	22.0	--	1.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Aluminum	7429-90-5	µg/kg	6.37E+06	--[b]	32.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,760	--[b]	32.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Aroclor-1260	11096-82-5	µg/kg	294	--[b]	32.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	2,550	20,000[d]	32.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-1_Deep	non-Rad	Barium	7440-39-3	µg/kg	299,000	--[b]	32.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Beryllium	7440-41-7	µg/kg	218	--[b]	32.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Boron	7440-42-8	µg/kg	1,360	--[e]	32.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	263	176,066	32.0	5,502	2.00E-01	5,502	Scaled SWP SSL	No
618-1_Deep	non-Rad	Chromium	7440-47-3	µg/kg	7,740	--[b]	32.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	32.0	--	5.00E-03	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Copper	7440-50-8	µg/kg	46,300	3.40E+06	32.0	106,127	1.00E+00	106,127	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[f]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-1_Deep	non-Rad	Fluoride	16984-48-8	µg/kg	2,800	--[b]	32.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Iron	7439-89-6	µg/kg	2.47E+07	1.43E+08	32.0	4,470,245	5.00E+00	4,470,245	Scaled SWP SSL	Yes
618-1_Deep	non-Rad	Lead	7439-92-1	µg/kg	58,400	1.48E+06	32.0	46,385	5.00E-01	46,385	Scaled SWP SSL	Yes [h]
618-1_Deep	non-Rad	Lithium	7439-93-2	µg/kg	5,980	--[c]	32.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Manganese	7439-96-5	µg/kg	352,000	--[b]	32.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	1,180	8,451	32.0	264	2.50E+00	264	Scaled SWP SSL	Yes [h]
618-1_Deep	non-Rad	Molybdenum	7439-98-7	µg/kg	493	--[b]	32.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Nickel	7440-02-0	µg/kg	17,600	--[b]	32.0	--	4.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Nitrate	14797-55-8	µg/kg	1,700	1.36E+07	32.0	425,531	2.50E+00	425,531	Scaled SWP SSL	No
618-1_Deep	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	220	3.03E+06	32.0	94,562	---	94,562	Scaled SWP SSL	No
618-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	89,439	2.64E+06[e]	32.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-1_Deep	non-Rad	Vanadium	7440-62-2	µg/kg	73,000	--[c]	32.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Zinc	7440-66-6	µg/kg	134,000	6.41E+07	32.0	2,004,150	1.00E+00	2,004,150	Scaled SWP SSL	No [h]
618-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.46	--[b]	32.0	--	1.00E-01	--	Scaled SWP SSL	--
618-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	33	--[d]	32.0	--	---	--	Scaled SWP SSL	--
618-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	2.7	--[d]	32.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep	Rad	Uranium-238	U-238	pCi/g	32	--[d]	32.0	--	1.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06	--[b]	25.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	407	252,032	25.0	10,081	6.00E-01	10,081	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1.24E+06	--[b]	25.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	99	--[b]	25.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,580	20,000[g]	25.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	1.87E+06	--[b]	25.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	323	--[b]	25.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,620	--[c]	25.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,030	176,066	25.0	7,043	2.00E-01	7,043	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,900	--[b]	25.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,920	--[b]	25.0	--	5.00E-03	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	68,700	3.40E+06	25.0	135,843	1.00E+00	135,843	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	3,300	--[b]	25.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.41E+07	1.43E+08	25.0	5,721,914	5.00E+00	5,721,914	Scaled SWP SSL	Yes
618-1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	333,000	1.48E+06	25.0	59,372	5.00E-01	59,372	Scaled SWP SSL	Yes [h]
618-1_Deep_Focused	non-Rad	Lithium	7439-93-2	µg/kg	8,450	--[c]	25.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	351,000	--[b]	25.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8,940	8,451	25.0	338	2.50E+00	338	Scaled SWP SSL	Yes [h]
618-1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,140	--[b]	25.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	13,700	--[b]	25.0	--	4.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	11,900	1.36E+07	25.0	544,679	2.50E+00	544,679	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	1,560	3.03E+06	25.0	121,040	---	121,040	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,290	--[b]	25.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	196,154	2.64E+06[e]	25.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	70,900	--[c]	25.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	82,000	6.41E+07	25.0	2,565,312	1.00E+00	2,565,312	Scaled SWP SSL	No [h]
618-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	6.5	--[b]	25.0	--	1.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	70	--[d]	25.0	--	---	--	Scaled SWP SSL	--
618-1_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.5	--[d]	25.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	65	--[d]	25.0	--	1.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.21E+06	--[b]	40.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	264	--[b]	40.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	54	--[b]	40.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,280	20,000[g]	40.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Barium	7440-39-3	µg/kg	97,200	--[b]	40.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	188	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,190	--[c]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	68	176,066	40.0	4,402	2.00E-01	4,402	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,930	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,360	--[b]	40.0	--	5.00E-03	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-1_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,400	3.40E+06	40.0	84,902	1.00E+00	84,902	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Fluoride	16984-48-8	µg/kg	400	--[b]	40.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07	1.43E+08	40.0	3,576,196	5.00E+00	3,576,196	Scaled SWP SSL	Yes
618-1_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,100	1.48E+06	40.0	37,108	5.00E-01	37,108	Scaled SWP SSL	No [h]
618-1_Shallow	non-Rad	Lithium	7439-93-2	µg/kg	6,380	--[y]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	300,000	--[b]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	31	8,451	40.0	211	2.50E+00	211	Scaled SWP SSL	No [h]
618-1_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	336	--[b]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	8,150	--[b]	40.0	--	4.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Nitrate	14797-55-8	µg/kg	1,600	1.36E+07	40.0	340,425	2.50E+00	340,425	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	300	3.03E+06	40.0	75,650	---	75,650	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,224	2.64E+06[f]	40.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	56,300	--[y]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	42,100	6.41E+07	40.0	1,603,320	1.00E+00	1,603,320	Scaled SWP SSL	No [h]
618-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	--[d]	40.0	--	---	--	Scaled SWP SSL	--
618-1_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	--[d]	40.0	--	1.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.22E+07	--[b]	40.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	455	252,032	40.0	6,301	6.00E-01	6,301	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	35	133	40.0	3	1.65E-02	3	Scaled SWP SSL	Yes [h]
618-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	981	--[b]	40.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	56	--[b]	40.0	--	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	6,090	20,000[g]	40.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	102,000	--[b]	40.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	371	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	3,740	--[y]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	266	176,066	40.0	4,402	2.00E-01	4,402	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,500	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	40.0	--	5.00E-03	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,800	3.40E+06	40.0	84,902	1.00E+00	84,902	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	900	--[b]	40.0	--	5.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.28E+07	1.43E+08	40.0	3,576,196	5.00E+00	3,576,196	Scaled SWP SSL	Yes
618-1_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,210	1.48E+06	40.0	37,108	5.00E-01	37,108	Scaled SWP SSL	No [h]
618-1_Shallow_Focused	non-Rad	Lithium	7439-93-2	µg/kg	13,300	--[y]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	403,000	--[b]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	198	8,451	40.0	211	2.50E+00	211	Scaled SWP SSL	No [h]
618-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	356	--[b]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	16,800	--[b]	40.0	--	4.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	3,800	1.36E+07	40.0	340,425	2.50E+00	340,425	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	260	3.03E+06	40.0	75,650	---	75,650	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,120	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	24,957	2.64E+06[f]	40.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	64,700	--[y]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	68,100	6.41E+07	40.0	1,603,320	1.00E+00	1,603,320	Scaled SWP SSL	No [h]
618-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	40.0	--	---	--	Scaled SWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.99	--[d]	40.0	--	5.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	8.2	--[d]	40.0	--	1.00E+00	--	Scaled SWP SSL	--
618-12_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	8,557	20,000[g]	130.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-12_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	63	--[b]	130.0	--	3.30E-01	--	Scaled SWP SSL	--
618-12_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	60	1.50E+06	130.0	11,574	3.30E-01	11,574	Scaled SWP SSL	No
618-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	32,092	2.64E+06[f]	130.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.47	--[d]	130.0	--	5.00E-01	--	Scaled SWP SSL	--
618-12_Shallow	Rad	Uranium-238	U-238	pCi/g	11	--[d]	130.0	--	1.00E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Acetone	67-64-1	µg/kg	8.6	2.28E+08	40.0	571,210	2.00E-02	571,210	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.34E+06	--[b]	40.0	--	5.00E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	312	252,032	40.0	6,301	6.00E-01	6,301	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,500	20,000[g]	40.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Barium	7440-39-3	µg/kg	74,000	--[b]	40.0	--	5.00E-01	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{mg}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-13_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	212	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,050	--[a]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	63	176,066	40.0	4,402	2.00E-01	4,402	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,700	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,290	--[b]	40.0	--	5.00E-03	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Copper	7440-50-8	µg/kg	11,500	3.40E+06	40.0	84,902	1.00E+00	84,902	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.01E+07	1.43E+08	40.0	3,576,196	5.00E+00	3,576,196	Scaled SWP SSL	Yes
618-13_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,620	1.48E+06	40.0	37,108	5.00E-01	37,108	Scaled SWP SSL	No [h]
618-13_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	344,000	--[b]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	5.1	1,931	40.0	48	5.00E-03	48	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	420	--[b]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	12,400	--[b]	40.0	--	4.00E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Tin	7440-31-5	µg/kg	1,050	--[b]	40.0	--	1.00E+01	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,061	2.64E+06[f]	40.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	55,800	--[a]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	41,400	6.41E+07	40.0	1,603,320	1.00E+00	1,603,320	Scaled SWP SSL	No [h]
618-13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.038	--[b]	40.0	--	1.00E-01	--	Scaled SWP SSL	--
618-13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	--[d]	40.0	--	---	--	Scaled SWP SSL	--
618-13_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	--[d]	40.0	--	1.00E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	5.9	2.28E+08	40.0	571,210	2.00E-02	571,210	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	5.22E+06	--[b]	40.0	--	5.00E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	233	252,032	40.0	6,301	6.00E-01	6,301	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,390	20,000[g]	40.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	57,700	--[b]	40.0	--	5.00E-01	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	184	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	960	--[a]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	47	176,066	40.0	4,402	2.00E-01	4,402	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	8,740	--[b]	40.0	--	2.00E-01	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	5,710	--[b]	40.0	--	5.00E-03	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	10,100	3.40E+06	40.0	84,902	1.00E+00	84,902	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	150	6,000[i]	40.0	6,000	---	6,000	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	1.79E+07	1.43E+08	40.0	3,576,196	5.00E+00	3,576,196	Scaled SWP SSL	Yes
618-13_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	4,940	1.48E+06	40.0	37,108	5.00E-01	37,108	Scaled SWP SSL	No [h]
618-13_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	268,000	--[b]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	5.0	1,931	40.0	48	5.00E-03	48	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	297	--[b]	40.0	--	2.00E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,000	--[b]	40.0	--	4.00E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	745	--[b]	40.0	--	1.00E+01	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,855	2.64E+06[f]	40.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	48,600	--[a]	40.0	--	2.50E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	37,100	6.41E+07	40.0	1,603,320	1.00E+00	1,603,320	Scaled SWP SSL	No [h]
618-13_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	40.0	--	---	--	Scaled SWP SSL	--
618-13_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.96	--[d]	40.0	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	1,500	20,000[g]	47.7	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-2_Deep	non-Rad	Barium	7440-39-3	µg/kg	83,300	--[b]	47.7	--	5.00E-01	--	Scaled SWP SSL	--
618-2_Deep	non-Rad	Chromium	7440-47-3	µg/kg	6,700	--[b]	47.7	--	2.00E-01	--	Scaled SWP SSL	--
618-2_Deep	non-Rad	Lead	7439-92-1	µg/kg	6,600	1.48E+06	47.7	31,139	5.00E-01	31,139	Scaled SWP SSL	No [h]
618-2_Deep	non-Rad	Selenium	7782-49-2	µg/kg	780	302,457	47.7	6,345	1.00E+00	6,345	Scaled SWP SSL	No
618-2_Deep	non-Rad	Tin	7440-31-5	µg/kg	2,900	--[b]	47.7	--	1.00E+01	--	Scaled SWP SSL	--
618-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	491,176	2.64E+06[f]	47.7	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	7.9	--[b]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1.0	--[b]	47.7	--	1.00E-01	--	Scaled SWP SSL	--
618-2_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	1.5	--[b]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	91	--[b]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep	Rad	Plutonium-241	14119-32-5	pCi/g	42	--[b]	47.7	--	---	--	Scaled SWP SSL	--
618-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	12	227,428	47.7	4,771	5.00E-03	4,771	Scaled SWP SSL	No
618-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	161	--[d]	47.7	--	---	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg}\cdot\frac{\mu Ci}{10^{12}\,pCi}\cdot\frac{m}{L}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.78	--[d]	47.7	--	5.00E-01	--	Scaled SWP SSL	--
618-2_Deep	Rad	Uranium-238	U-238	pCi/g	165	--[d]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	6.9	--[b]	47.7	--	1.65E-02	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,300	20,000[f]	47.7	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-2_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	109,000	--[b]	47.7	--	5.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	27	--[b]	47.7	--	3.30E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	200	176,066	47.7	3,694	2.00E-01	3,694	Scaled SWP SSL	No
618-2_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	10,400	--[b]	47.7	--	2.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	18	3.56E+07	47.7	747,467	3.30E-01	747,467	Scaled SWP SSL	No
618-2_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,800	1.48E+06	47.7	31,139	5.00E-01	31,139	Scaled SWP SSL	No [h]
618-2_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,200	302,457	47.7	6,345	1.00E+00	6,345	Scaled SWP SSL	No
618-2_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	600	--[b]	47.7	--	2.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Tin	7440-31-5	µg/kg	42,500	--[b]	47.7	--	1.00E+01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	150,259	2.64E+06[c]	47.7	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-2_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	9.2	--[b]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.1	--[b]	47.7	--	1.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	1.6	--[b]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	92	--[b]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-241	14119-32-5	pCi/g	33	--[b]	47.7	--	---	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	227,428	47.7	4,771	5.00E-03	4,771	Scaled SWP SSL	No
618-2_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	48	--[d]	47.7	--	---	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	2.4	--[d]	47.7	--	5.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	50	--[d]	47.7	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	1,900	20,000[f]	60.2	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-2_Shallow	non-Rad	Barium	7440-39-3	µg/kg	79,100	--[b]	60.2	--	5.00E-01	--	Scaled SWP SSL	--
618-2_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	7,100	--[b]	60.2	--	2.00E-01	--	Scaled SWP SSL	--
618-2_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,600	1.48E+06	60.2	24,647	5.00E-01	24,647	Scaled SWP SSL	No [h]
618-2_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	760	302,457	60.2	5,022	1.00E+00	5,022	Scaled SWP SSL	No
618-2_Shallow	non-Rad	Tin	7440-31-5	µg/kg	2,400	--[b]	60.2	--	1.00E+01	--	Scaled SWP SSL	--
618-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,852	2.64E+06[c]	60.2	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-2_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.81	--[b]	60.2	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.2	--[b]	60.2	--	1.00E-01	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	7.7	--[b]	60.2	--	1.00E+00	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.2	--[d]	60.2	--	---	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.21	--[d]	60.2	--	5.00E-01	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Uranium-238	U-238	pCi/g	2.2	--[d]	60.2	--	1.00E+00	--	Scaled SWP SSL	--
618-3_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	20,000[f]	52.3	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-3_Shallow	non-Rad	Barium	7440-39-3	µg/kg	76,500	--[b]	52.3	--	5.00E-01	--	Scaled SWP SSL	--
618-3_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	9,700	--[b]	52.3	--	2.00E-01	--	Scaled SWP SSL	--
618-3_Shallow	non-Rad	Lead	7439-92-1	µg/kg	3,900	1.48E+06	52.3	28,363	5.00E-01	28,363	Scaled SWP SSL	No [h]
618-3_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	659	302,457	52.3	5,779	1.00E+00	5,779	Scaled SWP SSL	No
618-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,224	2.64E+06[c]	52.3	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.68	--[d]	52.3	--	---	--	Scaled SWP SSL	--
618-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	--[d]	52.3	--	1.00E+00	--	Scaled SWP SSL	--
618-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	238,577	2.64E+06[c]	52.3	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	80	--[d]	52.3	--	---	--	Scaled SWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.8	--[d]	52.3	--	5.00E-01	--	Scaled SWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	79	--[d]	52.3	--	1.00E+00	--	Scaled SWP SSL	--
618-4_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	2,200	20,000[f]	47.3	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-4_Deep	non-Rad	Lead	7439-92-1	µg/kg	20,000	1.48E+06	47.3	31,359	5.00E-01	31,359	Scaled SWP SSL	No [h]
618-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	64,506	2.64E+06[c]	47.3	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	20	--[d]	47.3	--	---	--	Scaled SWP SSL	--
618-4_Deep	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[d]	47.3	--	5.00E-01	--	Scaled SWP SSL	--
618-4_Deep	Rad	Uranium-238	U-238	pCi/g	22	--[d]	47.3	--	1.00E+00	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	2-Butanone	78-93-3	µg/kg	130	1.71E+08	47.3	362,231	3.30E-01	362,231	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Acetone	67-64-1	µg/kg	16	2.28E+08	47.3	482,713	2.00E-02	482,713	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,600	--[b]	47.3	--	1.65E-02	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{mg}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-4_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	2,700	20,000[g]	47.3	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	104,000	--[h]	47.3	--	5.00E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	4,700	--[h]	47.3	--	3.30E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,500	176,066	47.3	3,720	2.00E-01	3,720	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	27,700	--[h]	47.3	--	2.00E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Diethyl ether	60-29-7	µg/kg	1.0	3.98E+07	47.3	841,756	3.30E-03	841,756	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,900	1.48E+06	47.3	31,359	5.00E-01	31,359	Scaled SWP SSL	No [h]
618-4_Deep_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	40	1,931	47.3	41	5.00E-03	41	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Phenol	108-95-2	µg/kg	110	6.21E+06	47.3	131,283	3.30E-01	131,283	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	24	2,345	47.3	50	5.00E-03	50	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Toluene	108-88-3	µg/kg	4.8	2.35E+06	47.3	49,563	5.00E-03	49,563	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,000	--[e]	47.3	--	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	µg/kg	42,000	--[e]	47.3	--	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high bol	TPH/OILH	µg/kg	65	--[e]	47.3	--	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	20,777	2.64E+06[f]	47.3	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	3,511	47.3	74	5.00E-03	74	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloromonofluoromethane	75-69-4	µg/kg	12	2.90E+07	47.3	613,695	---	613,695	Scaled SWP SSL	No
618-4_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	7.2	--[d]	47.3	--	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.51	--[d]	47.3	--	5.00E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	6.9	--[d]	47.3	--	1.00E+00	--	Scaled SWP SSL	--
618-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,200	20,000[g]	30.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	49,000	1.48E+06	30.0	49,477	5.00E-01	49,477	Scaled SWP SSL	No [h]
618-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	7,456	2.64E+06[f]	30.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	3.2	--[d]	30.0	--	---	--	Scaled SWP SSL	--
618-4_Shallow	Rad	Uranium-238	U-238	pCi/g	3.1	--[d]	30.0	--	1.00E+00	--	Scaled SWP SSL	--
618-5_Deep	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	20,000[g]	34.2	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-5_Deep	non-Rad	Cadmium	7440-43-9	µg/kg	470	176,066	34.2	5,148	2.00E-01	5,148	Scaled SWP SSL	No
618-5_Deep	non-Rad	Chromium	7440-47-3	µg/kg	14,700	--[h]	34.2	--	2.00E-01	--	Scaled SWP SSL	--
618-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	82,300	1.48E+06	34.2	43,401	5.00E-01	43,401	Scaled SWP SSL	Yes [h]
618-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	26,618	2.64E+06[f]	34.2	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	8.6	--[d]	34.2	--	---	--	Scaled SWP SSL	--
618-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.46	--[d]	34.2	--	5.00E-01	--	Scaled SWP SSL	--
618-5_Deep	Rad	Uranium-238	U-238	pCi/g	8.9	--[d]	34.2	--	1.00E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.65E+06	--[h]	14.1	--	5.00E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,800	252,032	14.1	17,875	6.00E-01	17,875	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	3,500	20,000[g]	14.1	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	106,000	--[h]	14.1	--	5.00E-01	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	672	--[h]	14.1	--	2.00E-01	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	6,500	--[h]	14.1	--	2.00E-01	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	10,500	--[h]	14.1	--	5.00E-03	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	21,400	3.40E+06	14.1	240,857	1.00E+00	240,857	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Iron	7439-89-6	µg/kg	3.02E+07	1.43E+08	14.1	10,145,238	5.00E+00	10,145,238	Scaled SWP SSL	Yes
618-5_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,600	1.48E+06	14.1	105,270	5.00E-01	105,270	Scaled SWP SSL	No [h]
618-5_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	579,000	--[h]	14.1	--	2.50E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	33	8,451	14.1	599	2.50E+00	599	Scaled SWP SSL	No [h]
618-5_Deep_Focused	non-Rad	Nickel	7440-02-0	µg/kg	11,300	--[h]	14.1	--	4.00E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,270	302,457	14.1	21,451	1.00E+00	21,451	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	36,540	2.64E+06[f]	14.1	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	79,500	--[h]	14.1	--	2.50E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	65,800	6.41E+07	14.1	4,548,426	1.00E+00	4,548,426	Scaled SWP SSL	No [h]
618-5_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	14.1	--	---	--	Scaled SWP SSL	--
618-5_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.48	--[d]	14.1	--	5.00E-01	--	Scaled SWP SSL	--
618-5_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	12	--[d]	14.1	--	1.00E+00	--	Scaled SWP SSL	--
618-5_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,300	20,000[g]	50.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-5_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	11,300	--[h]	50.0	--	2.00E-01	--	Scaled SWP SSL	--
618-5_Shallow	non-Rad	Lead	7439-92-1	µg/kg	6,100	1.48E+06	50.0	29,686	5.00E-01	29,686	Scaled SWP SSL	No [h]
618-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,849	2.64E+06[f]	50.0	2,640,000	---	2,640,000	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot \text{to or} \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-5_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.94	--[d]	50.0	--	---	--	Scaled SWP SSL	--
618-5_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	--[d]	50.0	--	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Aluminum	7429-90-5	µg/kg	5.25E+06	--[b]	92.0	--	5.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	560	252,032	92.0	2,739	6.00E-01	2,739	Scaled SWP SSL	No
618-7_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	1,891	20,000[f]	92.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-7_Shallow_1	non-Rad	Barium	7440-39-3	µg/kg	68,874	--[b]	92.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Beryllium	7440-41-7	µg/kg	278	--[b]	92.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Cadmium	7440-43-9	µg/kg	65	176,066	92.0	1,914	2.00E-01	1,914	Scaled SWP SSL	No
618-7_Shallow_1	non-Rad	Chromium	7440-47-3	µg/kg	10,227	--[b]	92.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Cobalt	7440-48-4	µg/kg	9,152	--[b]	92.0	--	5.00E-03	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	16,120	3.40E+06	92.0	36,914	1.00E+00	36,914	Scaled SWP SSL	No
618-7_Shallow_1	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07	1.43E+08	92.0	1,554,868	5.00E+00	1,554,868	Scaled SWP SSL	Yes
618-7_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	14,567	1.48E+06	92.0	16,134	5.00E-01	16,134	Scaled SWP SSL	No [h]
618-7_Shallow_1	non-Rad	Manganese	7439-96-5	µg/kg	326,067	--[b]	92.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	44	8,451	92.0	92	2.50E+00	92	Scaled SWP SSL	No [h]
618-7_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	20,977	--[b]	92.0	--	4.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,547	--[b]	92.0	--	1.00E+01	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	10,814	2.64E+06[i]	92.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-7_Shallow_1	non-Rad	Vanadium	7440-62-2	µg/kg	74,576	--[c]	92.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Zinc	7440-66-6	µg/kg	49,177	6.41E+07	92.0	697,096	1.00E+00	697,096	Scaled SWP SSL	No [h]
618-7_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.067	--[b]	92.0	--	1.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	3.6	--[d]	92.0	--	---	--	Scaled SWP SSL	--
618-7_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.36	--[d]	92.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_1	Rad	Uranium-238	U-238	pCi/g	3.6	--[d]	92.0	--	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Aluminum	7429-90-5	µg/kg	4.97E+06	--[b]	11.0	--	5.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	660	252,032	11.0	22,912	6.00E-01	22,912	Scaled SWP SSL	No
618-7_Shallow_2	non-Rad	Arsenic	7440-38-2	µg/kg	2,500	20,000[f]	11.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-7_Shallow_2	non-Rad	Barium	7440-39-3	µg/kg	73,800	--[b]	11.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Beryllium	7440-41-7	µg/kg	440	--[b]	11.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Chromium	7440-47-3	µg/kg	6,800	--[b]	11.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Cobalt	7440-48-4	µg/kg	9,300	--[b]	11.0	--	5.00E-03	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Copper	7440-50-8	µg/kg	13,600	3.40E+06	11.0	308,734	1.00E+00	308,734	Scaled SWP SSL	No
618-7_Shallow_2	non-Rad	Iron	7439-89-6	µg/kg	2.60E+07	1.43E+08	11.0	13,004,350	5.00E+00	13,004,350	Scaled SWP SSL	Yes
618-7_Shallow_2	non-Rad	Lead	7439-92-1	µg/kg	2,800	1.48E+06	11.0	134,937	5.00E-01	134,937	Scaled SWP SSL	No [h]
618-7_Shallow_2	non-Rad	Manganese	7439-96-5	µg/kg	364,000	--[b]	11.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	20	8,451	11.0	768	2.50E+00	768	Scaled SWP SSL	No [h]
618-7_Shallow_2	non-Rad	Nickel	7440-02-0	µg/kg	9,700	--[b]	11.0	--	4.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,500	--[b]	11.0	--	1.00E+01	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,574	2.64E+06[i]	11.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-7_Shallow_2	non-Rad	Vanadium	7440-62-2	µg/kg	74,700	--[c]	11.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Zinc	7440-66-6	µg/kg	46,200	6.41E+07	11.0	5,830,255	1.00E+00	5,830,255	Scaled SWP SSL	No [h]
618-7_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	--[d]	11.0	--	---	--	Scaled SWP SSL	--
618-7_Shallow_2	Rad	Uranium-238	U-238	pCi/g	0.53	--[d]	11.0	--	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Aluminum	7429-90-5	µg/kg	6.74E+06	--[b]	21.0	--	5.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	450	252,032	21.0	12,002	6.00E-01	12,002	Scaled SWP SSL	No
618-7_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	2,800	20,000[f]	21.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-7_Shallow_3	non-Rad	Barium	7440-39-3	µg/kg	82,500	--[b]	21.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Beryllium	7440-41-7	µg/kg	310	--[b]	21.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Cadmium	7440-43-9	µg/kg	190	176,066	21.0	8,384	2.00E-01	8,384	Scaled SWP SSL	No
618-7_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	10,100	--[b]	21.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Cobalt	7440-48-4	µg/kg	8,600	--[b]	21.0	--	5.00E-03	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	13,600	3.40E+06	21.0	161,718	1.00E+00	161,718	Scaled SWP SSL	No
618-7_Shallow_3	non-Rad	Iron	7439-89-6	µg/kg	2.43E+07	1.43E+08	21.0	6,811,802	5.00E+00	6,811,802	Scaled SWP SSL	Yes
618-7_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	4,300	1.48E+06	21.0	70,681	5.00E-01	70,681	Scaled SWP SSL	No [h]
618-7_Shallow_3	non-Rad	Manganese	7439-96-5	µg/kg	357,000	--[b]	21.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	20	8,451	21.0	402	2.50E+00	402	Scaled SWP SSL	No [h]
618-7_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	10,100	--[b]	21.0	--	4.00E+00	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-7_Shallow_3	non-Rad	Tin	7440-31-5	µg/kg	1,800	--[b]	21.0	--	1.00E+01	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,852	2.64E+06[c]	21.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-7_Shallow_3	non-Rad	Vanadium	7440-62-2	µg/kg	68,200	--[b]	21.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	44,500	6.41E+07	21.0	3,053,943	1.00E+00	3,053,943	Scaled SWP SSL	No [h]
618-7_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	21.0	--	---	--	Scaled SWP SSL	--
618-7_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.085	--[d]	21.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_3	Rad	Uranium-238	U-238	pCi/g	0.95	--[d]	21.0	--	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Aluminum	7429-90-5	µg/kg	5.65E+06	--[b]	48.0	--	5.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Antimony	7440-36-0	µg/kg	250	252,032	48.0	5,251	6.00E-01	5,251	Scaled SWP SSL	No
618-7_Shallow_4	non-Rad	Arsenic	7440-38-2	µg/kg	5,200	20,000[f]	48.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-7_Shallow_4	non-Rad	Barium	7440-39-3	µg/kg	57,900	--[b]	48.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Beryllium	7440-41-7	µg/kg	220	--[b]	48.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Cadmium	7440-43-9	µg/kg	90	176,066	48.0	3,668	2.00E-01	3,668	Scaled SWP SSL	No
618-7_Shallow_4	non-Rad	Chromium	7440-47-3	µg/kg	11,400	--[b]	48.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Cobalt	7440-48-4	µg/kg	6,700	--[b]	48.0	--	5.00E-03	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Copper	7440-50-8	µg/kg	13,200	3.40E+06	48.0	70,752	1.00E+00	70,752	Scaled SWP SSL	No
618-7_Shallow_4	non-Rad	Iron	7439-89-6	µg/kg	2.12E+07	1.43E+08	48.0	2,980,164	5.00E+00	2,980,164	Scaled SWP SSL	Yes
618-7_Shallow_4	non-Rad	Lead	7439-92-1	µg/kg	3,000	1.48E+06	48.0	30,923	5.00E-01	30,923	Scaled SWP SSL	No [h]
618-7_Shallow_4	non-Rad	Manganese	7439-96-5	µg/kg	285,000	--[b]	48.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Nickel	7440-02-0	µg/kg	12,900	--[b]	48.0	--	4.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Tin	7440-31-5	µg/kg	710	--[b]	48.0	--	1.00E+01	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	2,064	2.64E+06[c]	48.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-7_Shallow_4	non-Rad	Vanadium	7440-62-2	µg/kg	54,800	--[b]	48.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_4	non-Rad	Zinc	7440-66-6	µg/kg	37,000	6.41E+07	48.0	1,336,100	1.00E+00	1,336,100	Scaled SWP SSL	No [h]
618-7_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.69	--[d]	48.0	--	---	--	Scaled SWP SSL	--
618-7_Shallow_4	Rad	Uranium-238	U-238	pCi/g	0.76	--[d]	48.0	--	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	150	4.94E+07	240.0	205,792	1.00E-01	205,792	Scaled SWP SSL	No
618-7_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	7.61E+06	--[b]	240.0	--	5.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	980	252,032	240.0	1,050	6.00E-01	1,050	Scaled SWP SSL	No
618-7_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	6.7	133	240.0	1	1.65E-02	1	Scaled SWP SSL	Yes [h]
618-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	4,200	20,000[f]	240.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-7_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	92,800	--[b]	240.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	88	--[b]	240.0	--	1.50E-02	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	66	--[b]	240.0	--	1.50E-02	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	52	--[b]	240.0	--	1.50E-02	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	11	--[b]	240.0	--	1.50E-02	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	370	--[b]	240.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	470	--[b]	240.0	--	3.30E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	6,200	176,066	240.0	734	2.00E-01	734	Scaled SWP SSL	Yes [h]
618-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	65,900	--[b]	240.0	--	2.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	69	--[b]	240.0	--	1.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,000	--[b]	240.0	--	5.00E-03	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	25,000	3.40E+06	240.0	14,150	1.00E+00	14,150	Scaled SWP SSL	Yes [h]
618-7_Shallow_Focused	non-Rad	Dibenz(a,h)anthracene	53-70-3	µg/kg	45	--[b]	240.0	--	3.00E-02	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	33	3.56E+07	240.0	148,455	3.30E-01	148,455	Scaled SWP SSL	No
618-7_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	48	2.82E+08	240.0	1,173,903	5.00E-02	1,173,903	Scaled SWP SSL	No
618-7_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.87E+07	1.43E+08	240.0	596,033	5.00E+00	596,033	Scaled SWP SSL	Yes
618-7_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	6,500	1.48E+06	240.0	6,185	5.00E-01	6,185	Scaled SWP SSL	Yes [h]
618-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	425,000	--[b]	240.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	8,451	240.0	35	2.50E+00	35	Scaled SWP SSL	No [h]
618-7_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	17,200	--[b]	240.0	--	4.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	410	--[b]	240.0	--	5.00E-02	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,200	--[b]	240.0	--	1.00E+01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPH/OILH	µg/kg	680,000	--[b]	240.0	--	---	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	19,563	2.64E+06[c]	240.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	80,500	--[b]	240.0	--	2.50E+00	--	Scaled SWP SSL	--
618-7_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,400	6.41E+07	240.0	267,220	1.00E+00	267,220	Scaled SWP SSL	No [h]

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-7_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.010	--[h]	240.0	--	1.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	240.0	--	--	--	Scaled SWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.97	--[d]	240.0	--	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	6.4	--[d]	240.0	--	1.00E+00	--	Scaled SWP SSL	--
618-8_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	4,100	20,000[f]	28.8	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-8_Shallow	non-Rad	Barium	7440-39-3	µg/kg	97,600	--[h]	28.8	--	5.00E-01	--	Scaled SWP SSL	--
618-8_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	12,400	--[h]	28.8	--	2.00E-01	--	Scaled SWP SSL	--
618-8_Shallow	non-Rad	Lead	7439-92-1	µg/kg	5,100	1.48E+06	28.8	51,628	5.00E-01	51,628	Scaled SWP SSL	No [h]
618-8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	846	302,457	28.8	10,520	1.00E+00	10,520	Scaled SWP SSL	No
618-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	1,935	2.64E+06[f]	28.8	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.2	--[d]	28.8	--	---	--	Scaled SWP SSL	--
618-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.73	--[d]	28.8	--	1.00E+00	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	110	210	7.0	30	5.00E-03	30	Scaled SWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	680	2.28E+08	7.0	3,264,060	2.00E-02	3,264,060	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	390	148	7.0	21	1.65E-03	21	Scaled SWP SSL	Yes [m]
618-9_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	8.57E+06	--[h]	7.0	--	5.00E+00	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	µg/kg	1,900	--[h]	7.0	--	1.65E-02	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	µg/kg	1,900	17	7.0	2	1.65E-02	2	Scaled SWP SSL	Yes [m]
618-9_Shallow_Focused	non-Rad	Aroclor-1232	11141-16-5	µg/kg	1,900	17	7.0	2	1.65E-02	2	Scaled SWP SSL	Yes [m]
618-9_Shallow_Focused	non-Rad	Aroclor-1242	53469-21-9	µg/kg	1,900	143	7.0	20	1.65E-02	20	Scaled SWP SSL	Yes [hm]
618-9_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,900	133	7.0	19	1.65E-02	19	Scaled SWP SSL	Yes [hm]
618-9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,900	--[h]	7.0	--	1.65E-02	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,900	--[h]	7.0	--	1.65E-02	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	20,000[f]	7.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Barium	7440-39-3	µg/kg	90,200	--[h]	7.0	--	5.00E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	µg/kg	330	--[h]	7.0	--	2.00E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	5,200	--[h]	7.0	--	3.30E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	2,700	1.50E+06	7.0	214,947	3.30E-01	214,947	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	69	--[h]	7.0	--	1.65E-02	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Chloroform	67-66-3	µg/kg	9.0	5,207	7.0	744	5.00E-03	744	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	9,700	--[h]	7.0	--	2.00E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	µg/kg	11,400	--[h]	7.0	--	5.00E-03	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	16,700	3.40E+06	7.0	485,154	1.00E+00	485,154	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	7,200	3.56E+07	7.0	5,089,894	3.30E-01	5,089,894	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	44	--[h]	7.0	--	1.65E-03	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachlorobutadiene	87-68-3	µg/kg	760	--[h]	7.0	--	3.30E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachloroethane	67-72-1	µg/kg	17,000	29,166	7.0	4,167	3.30E-01	4,167	Scaled SWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Iron	7439-89-6	µg/kg	2.49E+07	1.43E+08	7.0	20,435,407	5.00E+00	20,435,407	Scaled SWP SSL	Yes
618-9_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	7,700	1.48E+06	7.0	212,044	5.00E-01	212,044	Scaled SWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	µg/kg	359,000	--[h]	7.0	--	2.50E+00	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	330	8,451	7.0	1,207	2.50E+00	1,207	Scaled SWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2,300	1,931	7.0	276	5.00E-03	276	Scaled SWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	µg/kg	10,600	--[h]	7.0	--	4.00E+00	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	NItrate	14797-55-8	µg/kg	1.67E+06	1.36E+07	7.0	1,945,284	2.50E+00	1,945,284	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	920	2,345	7.0	335	5.00E-03	335	Scaled SWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Toluene	108-88-3	µg/kg	9.0	2.35E+06	7.0	335,139	5.00E-03	335,139	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	8962.9	2.64E+06[f]	7.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	0.002	3511	7.0	502	5.00E-03	502	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	µg/kg	59,300	--[h]	7.0	--	2.50E+00	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	52,300	6.41E+07	7.0	9,161,829	1.00E+00	9,161,829	Scaled SWP SSL	No [h]
618-9_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.071	--[d]	7.0	--	5.00E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	3.0	--[d]	7.0	--	1.00E+00	--	Scaled SWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	42	143	49.0	3	1.65E-02	3	Scaled SWP SSL	Yes [h]
628-4_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,115	133	49.0	3	1.65E-02	3	Scaled SWP SSL	Yes [hm]
628-4_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	243	--[h]	49.0	--	1.65E-02	--	Scaled SWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	38	--[h]	49.0	--	1.65E-02	--	Scaled SWP SSL	--
628-4_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	3,864	20,000[f]	49.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{mg}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[f]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
628-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	99,167	1.48E+06	49.0	30,292	5.00E-01	30,292	Scaled SWP SSL	Yes [h]
628-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,163	2.64E+06[i]	49.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
628-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	49.0	--	---	--	Scaled SWP SSL	--
628-4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.11	--[d]	49.0	--	5.00E-01	--	Scaled SWP SSL	--
628-4_Shallow	Rad	Uranium-238	U-238	pCi/g	1.0	--[d]	49.0	--	1.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	117	4.94E+07	8.0	6,179,750	1.00E-01	6,179,750	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.34E+06	--[b]	8.0	--	5.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	7.0	--[b]	8.0	--	5.00E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	359	252,032	8.0	31,504	6.00E-01	31,504	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,970	133	8.0	17	1.65E-02	17	Scaled SWP SSL	Yes [h,i,j]
UPR-300-17_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	450	--[b]	8.0	--	1.65E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	113	--[b]	8.0	--	1.65E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,573	20,000[g]	8.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Barium	7440-39-3	µg/kg	81,014	--[b]	8.0	--	5.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	59	--[b]	8.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	44	--[b]	8.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	33	--[b]	8.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	9.9	--[b]	8.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	240	--[b]	8.0	--	2.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,903	--[c]	8.0	--	2.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	173	176,066	8.0	22,008	2.00E-01	22,008	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	13,795	--[b]	8.0	--	2.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	39	--[b]	8.0	--	1.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,688	--[b]	8.0	--	5.00E-03	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Copper	7440-50-8	µg/kg	15,135	3.40E+06	8.0	424,510	1.00E+00	424,510	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	35	2.82E+08	8.0	35,217,075	5.00E-02	35,217,075	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.9	1.06E+08	8.0	13,250,862	3.00E-02	13,250,862	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	5.9	--[b]	8.0	--	3.00E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Iron	7439-89-6	µg/kg	1.90E+07	1.43E+08	8.0	17,880,981	5.00E+00	17,880,981	Scaled SWP SSL	Yes
UPR-300-17_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,240	1.48E+06	8.0	185,538	5.00E-01	185,538	Scaled SWP SSL	No [h]
UPR-300-17_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	285,159	--[b]	8.0	--	2.50E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	69	8,451	8.0	1,056	2.50E+00	1,056	Scaled SWP SSL	No [h]
UPR-300-17_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	412	--[b]	8.0	--	2.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	48	6.97E+07	8.0	8,712,520	2.00E+00	8,712,520	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	563,654	--[b]	8.0	--	4.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	34	--[b]	8.0	--	5.00E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Silver	7440-22-4	µg/kg	340	--[b]	8.0	--	2.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,950	--[c]	8.0	--	---	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boi	TPHOILH	µg/kg	210,420	--[c]	8.0	--	---	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,420	2.64E+06[i]	8.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	52,150	--[c]	8.0	--	2.50E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	157,172	6.41E+07	8.0	8,016,600	1.00E+00	8,016,600	Scaled SWP SSL	No [h]
UPR-300-17_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	6.1	--[d]	8.0	--	---	--	Scaled SWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[d]	8.0	--	5.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-238	U-238	pCi/g	4.0	--[d]	8.0	--	1.00E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	13	4.94E+07	21.0	2,351,905	1.00E-01	2,351,905	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Aluminum	7429-90-5	µg/kg	6.80E+06	--[b]	21.0	--	5.00E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	381	252,032	21.0	12,002	6.00E-01	12,002	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	879	133	21.0	6	1.65E-02	6	Scaled SWP SSL	Yes [h,i,j]
UPR-300-46_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	490	--[b]	21.0	--	1.65E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	84	--[b]	21.0	--	1.65E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	2,846	20,000[g]	21.0	20,000	1.00E+00	20,000	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Barium	7440-39-3	µg/kg	82,137	--[b]	21.0	--	5.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.9	--[b]	21.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.4	--[b]	21.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.4	--[b]	21.0	--	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.8	--[b]	21.0	--	1.50E-02	--	Scaled SWP SSL	--

Table 7-2. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (Without Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water				
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \text{ to } \frac{pCi}{g} = \frac{pCi}{g}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
UPR-300-46_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	222	–[b]	21.0	--	2.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Boron	7440-42-8	µg/kg	1,714	–[c]	21.0	--	2.00E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	95	176,066	21.0	8,384	2.00E-01	8,384	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Chromium	7440-47-3	µg/kg	10,173	–[b]	21.0	--	2.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	5.6	–[b]	21.0	--	1.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Cobalt	7440-48-4	µg/kg	6,361	–[b]	21.0	--	5.00E-03	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Copper	7440-50-8	µg/kg	13,151	3.40E+06	21.0	161,718	1.00E+00	161,718	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.3	–[b]	21.0	--	3.00E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	9.6	2.82E+08	21.0	13,416,029	5.00E-02	13,416,029	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.2	1.06E+08	21.0	5,047,948	3.00E-02	5,047,948	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	7.6	–[b]	21.0	--	3.00E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Iron	7439-89-6	µg/kg	2.05E+07	1.43E+08	21.0	6,811,802	5.00E+00	6,811,802	Scaled SWP SSL	Yes
UPR-300-46_Shallow	non-Rad	Lead	7439-92-1	µg/kg	7,105	1.48E+06	21.0	70,681	5.00E-01	70,681	Scaled SWP SSL	No [h]
UPR-300-46_Shallow	non-Rad	Manganese	7439-96-5	µg/kg	311,001	–[b]	21.0	--	2.50E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	29	8,451	21.0	402	2.50E+00	402	Scaled SWP SSL	No [h]
UPR-300-46_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	456	–[b]	21.0	--	2.00E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	36	6.97E+07	21.0	3,319,055	2.00E+00	3,319,055	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	9,230	–[b]	21.0	--	4.00E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	4.4	–[b]	21.0	--	5.00E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,897	2.64E+06[i]	21.0	2,640,000	---	2,640,000	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Vanadium	7440-62-2	µg/kg	53,808	–[c]	21.0	--	2.50E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	47,945	6.41E+07	21.0	3,053,943	1.00E+00	3,053,943	Scaled SWP SSL	No [h]
UPR-300-46_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.070	–[b]	21.0	--	1.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.8	–[d]	21.0	--	---	--	Scaled SWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	–[d]	21.0	--	5.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	–[d]	21.0	--	1.00E+00	--	Scaled SWP SSL	--

Notes:

a. ECF-300FF5-11-0153, 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.

b. 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.

c. Due to the complex geochemistry of uranium in 300 Area source operable unit soils, uranium SSLs were derived using a site-specific two-dimensional model as described in ECF-300FF5-11-0151. These values are derived from a 2-D model, and therefore these values are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

d. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and then summing to provide a mass-based total uranium exposure point concentration (identified as Total_U_Isotopes), as described in ECF-300NPL-11-0137, Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit. These values are derived from a 2-D model, and therefore are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

e. A soil screening level is not calculated because a surface water cleanup level or surface water standard is not available for the analyte.

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 Hanford Site cleanup value for arsenic is 20 mg/kg based on the letter Issues Associated with Establishing Soil Cleanup Levels for Arsenic published by the Department of Ecology Toxics Cleanup Program on June 11, 2013. This letter indicates that the Method A soil cleanup level of 20 mg/kg can be used to define natural background levels when developing

h. If current Kd values (ECF-Hanford-12-0023 Rev. 3) were applied to the analysis, these contaminants would have been assigned "NR" due to the Kd exceeding the Kd breakthrough threshold; if exceedance resulted from scaling for these analytes (aroclor-1242, aroclor-1248, lead, mercury, zinc) it was dismissed based on this consideration.

i. Exceeded SWP SSL, but eliminated through further evaluation; volatile mass limited.

j. Exceeded SWP SSL but eliminated through further consideration; laboratory contaminant.

k. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1221 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

l. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1232 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

m. Exceeded before dimensional reevaluation.

n. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (1,600 µg/kg) is based on the maximum detection from a set of 13 samples (3 detects). With the exception of the maximum detection, all cadmium results (detected concentrations and MDLs) were within the range of naturally occurring levels (563 µg/kg and 2,980

o. Exceeded SWP SSL but eliminated through further evaluation; EPC is within background range.

-- = Not applicable or no value

Exceedances of cleanup levels that are not eliminated under further consideration are highlighted in yellow.

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300 ASH PITS_Shallow	non-Rad	Aroclor-1248	12672-29-6	ug/kg	52	--	--
300 ASH PITS_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	6,078	6,470	No
300 ASH PITS_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	96	--	--
300 ASH PITS_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	76	--	--
300 ASH PITS_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,450	3,210	No
300 ASH PITS_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.039	0.11	No
300 ASH PITS_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82	1.1	No
300 VTS_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.029	1.1	No
300-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	13,500	6,470	Yes
300-10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	200	--	--
300-10_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	230	--	--
300-10_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,078	3,210	Yes
300-10_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.16	1.1	No
300-10_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.041	0.11	No
300-10_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	1.1	Yes
300-109_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	5.62E+06	1.18E+07	No
300-109_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	122	--	--
300-109_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	40	--	--
300-109_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,420	6,470	No
300-109_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	63,300	132,000	No
300-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	1.2	--	--
300-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	2.3	--	--
300-109_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	180	1,510	No
300-109_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	632	3,890	No
300-109_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	59	563	No
300-109_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	6,950	18,500	No
300-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	ug/kg	1.8	--	--
300-109_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	6,420	15,700	No
300-109_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	10,800	22,000	No
300-109_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	14	--	--
300-109_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	1.75E+07	3.26E+07	No
300-109_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	2,890	10,200	No
300-109_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	278,000	512,000	No
300-109_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	22	13	Yes
300-109_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	341	470	No
300-109_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	8,490	19,100	No
300-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	ug/kg	1.6	--	--
300-109_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,108	3,210	Yes
300-109_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	47,600	85,100	No
300-109_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	34,700	67,800	No
300-109_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	1.1	Yes
300-109_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	1.1	Yes
300-109_Staging Pile Area_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	5.78E+06	1.18E+07	No
300-109_Staging Pile Area_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	37	--	--
300-109_Staging Pile Area_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	19	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-109_Staging Pile Area_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,580	6,470	No
300-109_Staging Pile Area_Focused	non-Rad	Barium	7440-39-3	ug/kg	72,700	132,000	No
300-109_Staging Pile Area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	ug/kg	2.1	--	--
300-109_Staging Pile Area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	3.3	--	--
300-109_Staging Pile Area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	1.3	--	--
300-109_Staging Pile Area_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	203	1,510	No
300-109_Staging Pile Area_Focused	non-Rad	Boron	7440-42-8	ug/kg	1,060	3,890	No
300-109_Staging Pile Area_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	66	563	No
300-109_Staging Pile Area_Focused	non-Rad	Chromium	7440-47-3	ug/kg	8,170	18,500	No
300-109_Staging Pile Area_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	5,950	15,700	No
300-109_Staging Pile Area_Focused	non-Rad	Copper	7440-50-8	ug/kg	11,600	22,000	No
300-109_Staging Pile Area_Focused	non-Rad	Fluoranthene	206-44-0	ug/kg	5.1	--	--
300-109_Staging Pile Area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	29	--	--
300-109_Staging Pile Area_Focused	non-Rad	Iron	7439-89-6	ug/kg	1.84E+07	3.26E+07	No
300-109_Staging Pile Area_Focused	non-Rad	Lead	7439-92-1	ug/kg	5,030	10,200	No
300-109_Staging Pile Area_Focused	non-Rad	Manganese	7439-96-5	ug/kg	286,000	512,000	No
300-109_Staging Pile Area_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	408	470	No
300-109_Staging Pile Area_Focused	non-Rad	Nickel	7440-02-0	ug/kg	8,570	19,100	No
300-109_Staging Pile Area_Focused	non-Rad	Pyrene	129-00-0	ug/kg	7.0	--	--
300-109_Staging Pile Area_Focused	non-Rad	Tin	7440-31-5	ug/kg	1,450	--	--
300-109_Staging Pile Area_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	6,877	3,210	Yes
300-109_Staging Pile Area_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	45,100	85,100	No
300-109_Staging Pile Area_Focused	non-Rad	Zinc	7440-66-6	ug/kg	48,800	67,800	No
300-109_Staging Pile Area_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	2.5	1.1	Yes
300-109_Staging Pile Area_Focused	Rad	Uranium-238	U-238	pCi/g	2.3	1.1	Yes
300-18_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,200	6,470	No
300-18_Shallow	non-Rad	Barium	7440-39-3	ug/kg	63,400	132,000	No
300-18_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	650	1,510	No
300-18_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	40	563	No
300-18_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	6,900	18,500	No
300-18_Shallow	non-Rad	Lead	7439-92-1	ug/kg	3,600	10,200	No
300-18_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,136	3,210	No
300-18_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.65	1.1	No
300-18_Shallow	Rad	Uranium-238	U-238	pCi/g	0.41	1.1	No
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	ug/kg	120,000	--	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling	TPH/OILH	ug/kg	230,000	--	--
300-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling	TPH/OILH	ug/kg	52,000	--	--
300-259_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	5.99E+06	1.18E+07	No
300-259_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	322	130	Yes
300-259_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,096	6,470	No
300-259_Shallow	non-Rad	Barium	7440-39-3	ug/kg	75,232	132,000	No
300-259_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	226	1,510	No
300-259_Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,303	3,890	No
300-259_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	252	563	No
300-259_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	7,901	18,500	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-259_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	5,831	15,700	No
300-259_Shallow	non-Rad	Copper	7440-50-8	ug/kg	10,692	22,000	No
300-259_Shallow	non-Rad	Iron	7439-89-6	ug/kg	1.96E+07	3.26E+07	No
300-259_Shallow	non-Rad	Lead	7439-92-1	ug/kg	4,625	10,200	No
300-259_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	318,874	512,000	No
300-259_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	10	13	No
300-259_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	303	470	No
300-259_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	8,751	19,100	No
300-259_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,876	3,210	Yes
300-259_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	42,626	85,100	No
300-259_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	479,584	67,800	Yes
300-259_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.6	1.1	Yes
300-259_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	1.1	Yes
300-260_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	8.17E+06	1.18E+07	No
300-260_Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	922	130	Yes
300-260_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,160	6,470	No
300-260_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	122,000	132,000	No
300-260_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	239	1,510	No
300-260_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	8,360	3,890	Yes
300-260_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	110	563	No
300-260_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	9,890	18,500	No
300-260_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	7,430	15,700	No
300-260_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	73,300	22,000	Yes
300-260_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.04E+07	3.26E+07	No
300-260_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	18,300	10,200	Yes
300-260_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	328,000	512,000	No
300-260_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	12	13	No
300-260_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	537	470	Yes
300-260_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	10,200	19,100	No
300-260_Shallow_Focused	non-Rad	Silver	7440-22-4	ug/kg	206	167	Yes
300-260_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	12,800	3,210	Yes
300-260_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	59,000	85,100	No
300-260_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	77,400	67,800	Yes
300-260_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.25	0.11	Yes
300-260_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	4.3	1.1	Yes
300-272_Overburden_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	ug/kg	13,100	--	--
300-272_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	ug/kg	43,100	--	--
300-275_Shallow_1	non-Rad	Acenaphthene	83-32-9	ug/kg	960	--	--
300-275_Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	5.61E+06	1.18E+07	No
300-275_Shallow_1	non-Rad	Antimony	7440-36-0	ug/kg	260	130	Yes
300-275_Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	2,211	6,470	No
300-275_Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	75,261	132,000	No
300-275_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	1.3	--	--
300-275_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	1.9	--	--
300-275_Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	452	1,510	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-275_Shallow_1	non-Rad	Boron	7440-42-8	ug/kg	1,466	3,890	No
300-275_Shallow_1	non-Rad	Cadmium	7440-43-9	ug/kg	83	563	No
300-275_Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	8,022	18,500	No
300-275_Shallow_1	non-Rad	Chrysene	218-01-9	ug/kg	2.2	--	--
300-275_Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	5,847	15,700	No
300-275_Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	42,923	22,000	Yes
300-275_Shallow_1	non-Rad	Fluoranthene	206-44-0	ug/kg	2,300	--	--
300-275_Shallow_1	non-Rad	Fluorene	86-73-7	ug/kg	81	--	--
300-275_Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	1.79E+07	3.26E+07	No
300-275_Shallow_1	non-Rad	Lead	7439-92-1	ug/kg	7,189	10,200	No
300-275_Shallow_1	non-Rad	Lithium	7439-93-2	ug/kg	6,686	13,300	No
300-275_Shallow_1	non-Rad	Manganese	7439-96-5	ug/kg	276,815	512,000	No
300-275_Shallow_1	non-Rad	Mercury	7439-97-6	ug/kg	17	13	Yes
300-275_Shallow_1	non-Rad	Molybdenum	7439-98-7	ug/kg	378	470	No
300-275_Shallow_1	non-Rad	Nickel	7440-02-0	ug/kg	9,461	19,100	No
300-275_Shallow_1	non-Rad	Silver	7440-22-4	ug/kg	121	167	No
300-275_Shallow_1	non-Rad	Strontium	7440-24-6	ug/kg	20,196	--	--
300-275_Shallow_1	non-Rad	Tin	7440-31-5	ug/kg	1,483	--	--
300-275_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	22,251	3,210	Yes
300-275_Shallow_1	non-Rad	Vanadium	7440-62-2	ug/kg	45,128	85,100	No
300-275_Shallow_1	non-Rad	Zinc	7440-66-6	ug/kg	41,014	67,800	No
300-275_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.046	1.1	No
300-275_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	7.7	1.1	Yes
300-275_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.0	0.11	Yes
300-275_Shallow_1	Rad	Uranium-238	U-238	pCi/g	7.4	1.1	Yes
300-275_Shallow_2	non-Rad	Acenaphthene	83-32-9	ug/kg	3.6	--	--
300-275_Shallow_2	non-Rad	Aluminum	7429-90-5	ug/kg	6.24E+06	1.18E+07	No
300-275_Shallow_2	non-Rad	Arsenic	7440-38-2	ug/kg	2,761	6,470	No
300-275_Shallow_2	non-Rad	Barium	7440-39-3	ug/kg	68,607	132,000	No
300-275_Shallow_2	non-Rad	Beryllium	7440-41-7	ug/kg	254	1,510	No
300-275_Shallow_2	non-Rad	Boron	7440-42-8	ug/kg	1,147	3,890	No
300-275_Shallow_2	non-Rad	Cadmium	7440-43-9	ug/kg	144	563	No
300-275_Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	8,994	18,500	No
300-275_Shallow_2	non-Rad	Cobalt	7440-48-4	ug/kg	5,977	15,700	No
300-275_Shallow_2	non-Rad	Copper	7440-50-8	ug/kg	11,596	22,000	No
300-275_Shallow_2	non-Rad	Fluoranthene	206-44-0	ug/kg	56	--	--
300-275_Shallow_2	non-Rad	Fluorene	86-73-7	ug/kg	2.6	--	--
300-275_Shallow_2	non-Rad	Iron	7439-89-6	ug/kg	1.96E+07	3.26E+07	No
300-275_Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	4,099	10,200	No
300-275_Shallow_2	non-Rad	Lithium	7439-93-2	ug/kg	7,067	13,300	No
300-275_Shallow_2	non-Rad	Manganese	7439-96-5	ug/kg	292,731	512,000	No
300-275_Shallow_2	non-Rad	Mercury	7439-97-6	ug/kg	28	13	Yes
300-275_Shallow_2	non-Rad	Molybdenum	7439-98-7	ug/kg	404	470	No
300-275_Shallow_2	non-Rad	Nickel	7440-02-0	ug/kg	9,593	19,100	No
300-275_Shallow_2	non-Rad	Strontium	7440-24-6	ug/kg	27,081	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-275_Shallow_2	non-Rad	Tin	7440-31-5	ug/kg	1,149	--	--
300-275_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,725	3,210	Yes
300-275_Shallow_2	non-Rad	Vanadium	7440-62-2	ug/kg	51,632	85,100	No
300-275_Shallow_2	non-Rad	Zinc	7440-66-6	ug/kg	41,245	67,800	No
300-275_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	1.1	Yes
300-275_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	0.24	0.11	Yes
300-275_Shallow_2	Rad	Uranium-238	U-238	pCi/g	1.2	1.1	Yes
300-33, 300-41, 300-256_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.32E+06	1.18E+07	No
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1016	12674-11-2	ug/kg	10	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1242	53469-21-9	ug/kg	16	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1248	12672-29-6	ug/kg	190	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	84	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1260	11096-82-5	ug/kg	17	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,638	6,470	No
300-33, 300-41, 300-256_Shallow	non-Rad	Barium	7440-39-3	ug/kg	72,411	132,000	No
300-33, 300-41, 300-256_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	256	1,510	No
300-33, 300-41, 300-256_Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,484	3,890	No
300-33, 300-41, 300-256_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	228	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	94	563	No
300-33, 300-41, 300-256_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	8,781	18,500	No
300-33, 300-41, 300-256_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,273	15,700	No
300-33, 300-41, 300-256_Shallow	non-Rad	Copper	7440-50-8	ug/kg	13,662	22,000	No
300-33, 300-41, 300-256_Shallow	non-Rad	Fluoride	16984-48-8	ug/kg	1,651	2,810	No
300-33, 300-41, 300-256_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.00E+07	3.26E+07	No
300-33, 300-41, 300-256_Shallow	non-Rad	Lead	7439-92-1	ug/kg	4,268	10,200	No
300-33, 300-41, 300-256_Shallow	non-Rad	Lithium	7439-93-2	ug/kg	5,495	13,300	No
300-33, 300-41, 300-256_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	314,762	512,000	No
300-33, 300-41, 300-256_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	16	13	Yes
300-33, 300-41, 300-256_Shallow	non-Rad	Methylene chloride	75-09-2	ug/kg	2.9	--	--
300-33, 300-41, 300-256_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	486	470	Yes
300-33, 300-41, 300-256_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	8,880	19,100	No
300-33, 300-41, 300-256_Shallow	non-Rad	Nitrate	14797-55-8	ug/kg	8,617	52,000	No
300-33, 300-41, 300-256_Shallow	non-Rad	Silver	7440-22-4	ug/kg	782	167	Yes
300-33, 300-41, 300-256_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	5,349	3,210	Yes
300-33, 300-41, 300-256_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	52,694	85,100	No
300-33, 300-41, 300-256_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	41,462	67,800	No
300-33, 300-41, 300-256_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.1	1.1	Yes
300-33, 300-41, 300-256_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.34	0.11	Yes
300-33, 300-41, 300-256_Shallow	Rad	Uranium-238	U-238	pCi/g	2.1	1.1	Yes
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	5.51E+06	1.18E+07	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	ug/kg	330	--	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	385	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	52	--	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,240	6,470	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	64,600	132,000	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	169	1,510	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	1,030	3,890	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	100	563	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	8,080	18,500	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	5,640	15,700	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	10,400	22,000	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Fluoride	16984-48-8	ug/kg	1,300	2,810	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	1.86E+07	3.26E+07	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	3,160	10,200	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Lithium	7439-93-2	ug/kg	6,580	13,300	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	259,000	512,000	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	ug/kg	2.2	--	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	275	470	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	8,040	19,100	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Nitrate	14797-55-8	ug/kg	17,900	52,000	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	6,460	3,210	Yes
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	51,400	85,100	No
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	38,900	67,800	No
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	3.0	1.1	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	2.2	1.1	Yes
300-37_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	100	--	--
300-37_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	3,200	--	--
300-44_Overburden_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	9,100	6,470	Yes
300-44_Overburden_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,027	3,210	No
300-44_Overburden_Focused	Rad	Uranium-238	U-238	pCi/g	0.35	1.1	No
300-44_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.71E+06	1.18E+07	No
300-44_Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	4,100	130	Yes
300-44_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	16,900	6,470	Yes
300-44_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	75,200	132,000	No
300-44_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	480	1,510	No
300-44_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	9,300	18,500	No
300-44_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,200	15,700	No
300-44_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	7,800	22,000	No
300-44_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	1.94E+07	3.26E+07	No
300-44_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	303,000	512,000	No
300-44_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	8,600	19,100	No
300-44_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	872	3,210	No
300-44_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	43,200	85,100	No
300-44_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	37,800	67,800	No
300-44_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.29	1.1	No
300-45_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	86	--	--
300-45_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	290	--	--
300-45_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,600	3,210	Yes
300-45_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.023	1.1	No
300-45_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.061	0.11	No
300-45_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	1.1	Yes
300-49_Overburden	non-Rad	1,2,4-Trichlorobenzene	120-82-1	ug/kg	31	--	--
300-49_Overburden	non-Rad	1,4-Dichlorobenzene	106-46-7	ug/kg	29	--	--
300-49_Overburden	non-Rad	2,4-Dinitrotoluene	121-14-2	ug/kg	19	--	--
300-49_Overburden	non-Rad	2-Chlorophenol	95-57-8	ug/kg	51	--	--
300-49_Overburden	non-Rad	4-Chloro-3-methylphenol	59-50-7	ug/kg	46	--	--
300-49_Overburden	non-Rad	Acenaphthene	83-32-9	ug/kg	31	--	--
300-49_Overburden	non-Rad	Aluminum	7429-90-5	ug/kg	6.30E+06	1.18E+07	No
300-49_Overburden	non-Rad	Antimony	7440-36-0	ug/kg	232	130	Yes
300-49_Overburden	non-Rad	Aroclor-1254	11097-69-1	ug/kg	3,008	--	--
300-49_Overburden	non-Rad	Arsenic	7440-38-2	ug/kg	3,291	6,470	No
300-49_Overburden	non-Rad	Barium	7440-39-3	ug/kg	76,068	132,000	No
300-49_Overburden	non-Rad	Beryllium	7440-41-7	ug/kg	201	1,510	No
300-49_Overburden	non-Rad	Cadmium	7440-43-9	ug/kg	174	563	No
300-49_Overburden	non-Rad	Chromium	7440-47-3	ug/kg	18,106	18,500	No
300-49_Overburden	non-Rad	Cobalt	7440-48-4	ug/kg	7,127	15,700	No
300-49_Overburden	non-Rad	Copper	7440-50-8	ug/kg	536,000	22,000	Yes
300-49_Overburden	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	52	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-49_Overburden	non-Rad	Iron	7439-89-6	ug/kg	2.08E+07	3.26E+07	No
300-49_Overburden	non-Rad	Lead	7439-92-1	ug/kg	36,964	10,200	Yes
300-49_Overburden	non-Rad	Manganese	7439-96-5	ug/kg	316,669	512,000	No
300-49_Overburden	non-Rad	Nickel	7440-02-0	ug/kg	13,035	19,100	No
300-49_Overburden	non-Rad	n-Nitrosodi-n-dipropylamine	621-64-7	ug/kg	40	--	--
300-49_Overburden	non-Rad	Pentachlorophenol	87-86-5	ug/kg	50	--	--
300-49_Overburden	non-Rad	Phenol	108-95-2	ug/kg	50	--	--
300-49_Overburden	non-Rad	Pyrene	129-00-0	ug/kg	40	--	--
300-49_Overburden	non-Rad	Silver	7440-22-4	ug/kg	703	167	Yes
300-49_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,066	3,210	No
300-49_Overburden	non-Rad	Vanadium	7440-62-2	ug/kg	50,380	85,100	No
300-49_Overburden	non-Rad	Zinc	7440-66-6	ug/kg	141,984	67,800	Yes
300-49_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	1.0	1.1	No
300-49_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	0.057	0.11	No
300-49_Overburden	Rad	Uranium-238	U-238	pCi/g	1.0	1.1	No
300-49_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.92E+06	1.18E+07	No
300-49_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	176	130	Yes
300-49_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,431	6,470	No
300-49_Shallow	non-Rad	Barium	7440-39-3	ug/kg	89,874	132,000	No
300-49_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	303	1,510	No
300-49_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	9,170	18,500	No
300-49_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	9,323	15,700	No
300-49_Shallow	non-Rad	Copper	7440-50-8	ug/kg	14,870	22,000	No
300-49_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.59E+07	3.26E+07	No
300-49_Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,629	10,200	No
300-49_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	361,805	512,000	No
300-49_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	10,664	19,100	No
300-49_Shallow	non-Rad	Silver	7440-22-4	ug/kg	621	167	Yes
300-49_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,983	3,210	No
300-49_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	58,672	85,100	No
300-49_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	54,651	67,800	No
300-49_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.15	1.1	No
300-49_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	1.1	Yes
300-49_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	0.11	Yes
300-49_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	1.1	Yes
300-50_Overburden	non-Rad	Aluminum	7429-90-5	ug/kg	6.68E+06	1.18E+07	No
300-50_Overburden	non-Rad	Aroclor-1254	11097-69-1	ug/kg	33	--	--
300-50_Overburden	non-Rad	Aroclor-1260	11096-82-5	ug/kg	229	--	--
300-50_Overburden	non-Rad	Arsenic	7440-38-2	ug/kg	6,897	6,470	Yes
300-50_Overburden	non-Rad	Barium	7440-39-3	ug/kg	117,742	132,000	No
300-50_Overburden	non-Rad	Beryllium	7440-41-7	ug/kg	325	1,510	No
300-50_Overburden	non-Rad	Cadmium	7440-43-9	ug/kg	563	563	No
300-50_Overburden	non-Rad	Chromium	7440-47-3	ug/kg	12,197	18,500	No
300-50_Overburden	non-Rad	Cobalt	7440-48-4	ug/kg	9,389	15,700	No
300-50_Overburden	non-Rad	Copper	7440-50-8	ug/kg	64,527	22,000	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
300-50_Overburden	non-Rad	Iron	7439-89-6	ug/kg	1.90E+07	3.26E+07	No
300-50_Overburden	non-Rad	Lead	7439-92-1	ug/kg	5,905	10,200	No
300-50_Overburden	non-Rad	Manganese	7439-96-5	ug/kg	314,271	512,000	No
300-50_Overburden	non-Rad	Nickel	7440-02-0	ug/kg	15,229	19,100	No
300-50_Overburden	non-Rad	Silver	7440-22-4	ug/kg	1,202	167	Yes
300-50_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	17,919	3,210	Yes
300-50_Overburden	non-Rad	Vanadium	7440-62-2	ug/kg	45,243	85,100	No
300-50_Overburden	non-Rad	Zinc	7440-66-6	ug/kg	45,889	67,800	No
300-50_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.056	1.1	No
300-50_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	6.0	1.1	Yes
300-50_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	0.45	0.11	Yes
300-50_Overburden	Rad	Uranium-238	U-238	pCi/g	6.0	1.1	Yes
300-50_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.88E+06	1.18E+07	No
300-50_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	3,000	130	Yes
300-50_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	126	--	--
300-50_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	6,403	6,470	No
300-50_Shallow	non-Rad	Barium	7440-39-3	ug/kg	103,029	132,000	No
300-50_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	282	1,510	No
300-50_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	19	--	--
300-50_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	463	563	No
300-50_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	16,841	18,500	No
300-50_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	9,109	15,700	No
300-50_Shallow	non-Rad	Copper	7440-50-8	ug/kg	16,820	22,000	No
300-50_Shallow	non-Rad	Iron	7439-89-6	ug/kg	1.96E+07	3.26E+07	No
300-50_Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,381	10,200	No
300-50_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	318,120	512,000	No
300-50_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,413	19,100	No
300-50_Shallow	non-Rad	Silver	7440-22-4	ug/kg	2,992	167	Yes
300-50_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	22,938	3,210	Yes
300-50_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	46,964	85,100	No
300-50_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	41,344	67,800	No
300-50_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.056	1.1	No
300-50_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	7.9	1.1	Yes
300-50_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.66	0.11	Yes
300-50_Shallow	Rad	Uranium-238	U-238	pCi/g	8.4	1.1	Yes
300-8_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	574	1,510	No
300-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,374	3,210	No
300-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.79	1.1	No
300-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.82	1.1	No
316-1_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	40,572	3,210	Yes
316-1_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.10	1.1	No
316-1_Overburden	Rad	Cobalt-60	10198-40-0	pCi/g	0.32	0.0084	Yes
316-1_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	13	1.1	Yes
316-1_Overburden	Rad	Uranium-235	15117-96-1	pCi/g	1.1	0.11	Yes
316-1_Overburden	Rad	Uranium-238	U-238	pCi/g	13	1.1	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
316-1_Shallow_1	non-Rad	Aroclor-1248	12672-29-6	ug/kg	3,000	--	--
316-1_Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	19,014	6,470	Yes
316-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	69	--	--
316-1_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	98	--	--
316-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	83,027	3,210	Yes
316-1_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.032	1.1	No
316-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.2	0.11	Yes
316-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	28	1.1	Yes
316-1_Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	1.11E+07	1.18E+07	No
316-1_Shallow_3	non-Rad	Antimony	7440-36-0	ug/kg	490	130	Yes
316-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	ug/kg	98	--	--
316-1_Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	5,138	6,470	No
316-1_Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	129,106	132,000	No
316-1_Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	416	1,510	No
316-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	342	--	--
316-1_Shallow_3	non-Rad	Cadmium	7440-43-9	ug/kg	474	563	No
316-1_Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	50,455	18,500	Yes
316-1_Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	9,703	15,700	No
316-1_Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	1.37E+06	22,000	Yes
316-1_Shallow_3	non-Rad	Heptachlor epoxide	1024-57-3	ug/kg	3.2	--	--
316-1_Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	2.44E+07	3.26E+07	No
316-1_Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	14,409	10,200	Yes
316-1_Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	392,825	512,000	No
316-1_Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	1,105	13	Yes
316-1_Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	94,656	19,100	Yes
316-1_Shallow_3	non-Rad	Phenol	108-95-2	ug/kg	28	--	--
316-1_Shallow_3	non-Rad	Selenium	7782-49-2	ug/kg	1,444	780	Yes
316-1_Shallow_3	non-Rad	Silver	7440-22-4	ug/kg	13,196	167	Yes
316-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	63,074	3,210	Yes
316-1_Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	56,707	85,100	No
316-1_Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	82,016	67,800	Yes
316-1_Shallow_3	Rad	Cesium-137	10045-97-3	pCi/g	0.37	1.1	No
316-1_Shallow_3	Rad	Cobalt-60	10198-40-0	pCi/g	2.3	0.0084	Yes
316-1_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	23	1.1	Yes
316-1_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	2.6	0.11	Yes
316-1_Shallow_3	Rad	Uranium-238	U-238	pCi/g	21	1.1	Yes
316-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	ug/kg	62	--	--
316-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	42,963	3,210	Yes
316-1_Shallow_4	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	0.0084	Yes
316-1_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	16	1.1	Yes
316-1_Shallow_4	Rad	Uranium-235	15117-96-1	pCi/g	1.1	0.11	Yes
316-1_Shallow_4	Rad	Uranium-238	U-238	pCi/g	14	1.1	Yes
316-2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	210,452	3,210	Yes
316-2_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.031	1.1	No
316-2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.092	0.0084	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
316-2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	86	1.1	Yes
316-2_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	12	0.11	Yes
316-2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	69	1.1	Yes
316-2_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	ug/kg	697	--	--
316-2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	ug/kg	42	--	--
316-2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	ug/kg	110	--	--
316-2_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	291,369	3,210	Yes
316-2_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	0.45	1.1	No
316-2_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.45	0.0084	Yes
316-2_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	115	1.1	Yes
316-2_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	11	0.11	Yes
316-2_Shallow_2	Rad	Uranium-238	U-238	pCi/g	96	1.1	Yes
316-2_Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	8,000	6,470	Yes
316-2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	260	--	--
316-2_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	180	--	--
316-2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	73,174	3,210	Yes
316-2_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.91	0.11	Yes
316-2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	24	1.1	Yes
316-5_Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	3,070	6,470	No
316-5_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	ug/kg	38	--	--
316-5_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	146	--	--
316-5_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	100	--	--
316-5_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	271,835	3,210	Yes
316-5_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.48	--	--
316-5_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	2.3	1.1	Yes
316-5_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	19	0.11	Yes
316-5_Shallow_1	Rad	Uranium-238	U-238	pCi/g	89	1.1	Yes
316-5_Shallow_2	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	140	--	--
316-5_Shallow_2	non-Rad	2-Butoxyethanol	111-76-2	ug/kg	240	--	--
316-5_Shallow_2	non-Rad	Arsenic	7440-38-2	ug/kg	3,180	6,470	No
316-5_Shallow_2	non-Rad	Barium	7440-39-3	ug/kg	76,700	132,000	No
316-5_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	180	--	--
316-5_Shallow_2	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	110	--	--
316-5_Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	6,900	18,500	No
316-5_Shallow_2	non-Rad	Chrysene	218-01-9	ug/kg	38	--	--
316-5_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	146	--	--
316-5_Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	3,200	10,200	No
316-5_Shallow_2	non-Rad	Selenium	7782-49-2	ug/kg	490	780	No
316-5_Shallow_2	non-Rad	Silver	7440-22-4	ug/kg	3,600	167	Yes
316-5_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	204,701	3,210	Yes
316-5_Shallow_2	Rad	Americium-241	14596-10-2	pCi/g	0.12	--	--
316-5_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	1.7	1.1	Yes
316-5_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	0.0084	Yes
316-5_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	9.0	0.11	Yes
316-5_Shallow_2	Rad	Uranium-238	U-238	pCi/g	68	1.1	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
316-5_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	ug/kg	57	--	--
316-5_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	70	--	--
316-5_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	52	--	--
316-5_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,300	6,470	No
316-5_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	190	--	--
316-5_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	1,500	--	--
316-5_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	138,095	3,210	Yes
316-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	1.1	Yes
316-5_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.072	0.054	Yes
316-5_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	7.7	0.11	Yes
316-5_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	45	1.1	Yes
331 LSLDF_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	ug/kg	25	--	--
331 LSLDF_Shallow_Focused	non-Rad	Acetone	67-64-1	ug/kg	590	--	--
331 LSLDF_Shallow_Focused	non-Rad	Aldrin	309-00-2	ug/kg	0.56	--	--
331 LSLDF_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	ug/kg	0.39	--	--
331 LSLDF_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	6.90E+06	1.18E+07	No
331 LSLDF_Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	360	130	Yes
331 LSLDF_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	850	--	--
331 LSLDF_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,400	6,470	No
331 LSLDF_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	78,600	132,000	No
331 LSLDF_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	570	1,510	No
331 LSLDF_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	910	--	--
331 LSLDF_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	1,700	3,890	No
331 LSLDF_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	340	--	--
331 LSLDF_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	140	563	No
331 LSLDF_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	10,300	18,500	No
331 LSLDF_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,600	15,700	No
331 LSLDF_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	15,400	22,000	No
331 LSLDF_Shallow_Focused	non-Rad	Dieldrin	60-57-1	ug/kg	13	--	--
331 LSLDF_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	98	--	--
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	ug/kg	1.9	--	--
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan II	33213-65-9	ug/kg	3.1	--	--
331 LSLDF_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.20E+07	3.26E+07	No
331 LSLDF_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	9,000	10,200	No
331 LSLDF_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	349,000	512,000	No
331 LSLDF_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	110	13	Yes
331 LSLDF_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	ug/kg	3.3	--	--
331 LSLDF_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	ug/kg	11	--	--
331 LSLDF_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	590	470	Yes
331 LSLDF_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	10,000	19,100	No
331 LSLDF_Shallow_Focused	non-Rad	Nitrate	14797-55-8	ug/kg	41,700	52,000	No
331 LSLDF_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	ug/kg	9,500	--	--
331 LSLDF_Shallow_Focused	non-Rad	Silver	7440-22-4	ug/kg	1,100	167	Yes
331 LSLDF_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,402	3,210	No
331 LSLDF_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	53,100	85,100	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
331 LSLDF_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	137,000	67,800	Yes
331 LSLDF_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	0.54	1.1	No
331 LSLDF_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.47	1.1	No
600-243_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	ug/kg	279	--	--
600-243_Shallow	non-Rad	Anthracene	120-12-7	ug/kg	31	--	--
600-243_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	1,300	130	Yes
600-243_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	27	--	--
600-243_Shallow	non-Rad	Aroclor-1260	11096-82-5	ug/kg	18	--	--
600-243_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	6,159	6,470	No
600-243_Shallow	non-Rad	Barium	7440-39-3	ug/kg	292,072	132,000	Yes
600-243_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	ug/kg	43	--	--
600-243_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	43	--	--
600-243_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	46	--	--
600-243_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	ug/kg	32	--	--
600-243_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	2,079	1,510	Yes
600-243_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	432	--	--
600-243_Shallow	non-Rad	Boron	7440-42-8	ug/kg	294,463	3,890	Yes
600-243_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	793	563	Yes
600-243_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	18,006	18,500	No
600-243_Shallow	non-Rad	Chrysene	218-01-9	ug/kg	63	--	--
600-243_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,207	15,700	No
600-243_Shallow	non-Rad	Copper	7440-50-8	ug/kg	53,981	22,000	Yes
600-243_Shallow	non-Rad	Dibenzofuran	132-64-9	ug/kg	78	--	--
600-243_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	37	--	--
600-243_Shallow	non-Rad	Fluoranthene	206-44-0	ug/kg	79	--	--
600-243_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	28	--	--
600-243_Shallow	non-Rad	Lead	7439-92-1	ug/kg	40,139	10,200	Yes
600-243_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	208,289	512,000	No
600-243_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	1,869	470	Yes
600-243_Shallow	non-Rad	Naphthalene	91-20-3	ug/kg	204	--	--
600-243_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	21,395	19,100	Yes
600-243_Shallow	non-Rad	Pyrene	129-00-0	ug/kg	70	--	--
600-243_Shallow	non-Rad	Selenium	7782-49-2	ug/kg	5,709	780	Yes
600-243_Shallow	non-Rad	Silver	7440-22-4	ug/kg	500	167	Yes
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	ug/kg	95,319	--	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling	TPH/OILH	ug/kg	334,524	--	--
600-243_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	46,986	85,100	No
600-243_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	84,099	67,800	Yes
600-259_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.034	1.1	No
600-259_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.068	1.1	No
600-259_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.038	1.1	No
600-47_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,300	6,470	No
600-47_Shallow	non-Rad	Barium	7440-39-3	ug/kg	67,000	132,000	No
600-47_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	500	1,510	No
600-47_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	90	563	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
600-47_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	5,500	18,500	No
600-47_Shallow	non-Rad	Lead	7439-92-1	ug/kg	3,500	10,200	No
600-47_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,303	3,210	Yes
600-47_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	1.1	Yes
600-47_Shallow	Rad	Uranium-238	U-238	pCi/g	1.6	1.1	Yes
618-1_Deep	non-Rad	Aluminum	7429-90-5	ug/kg	6.37E+06	1.18E+07	No
618-1_Deep	non-Rad	Aroclor-1254	11097-69-1	ug/kg	1,760	--	--
618-1_Deep	non-Rad	Aroclor-1260	11096-82-5	ug/kg	294	--	--
618-1_Deep	non-Rad	Arsenic	7440-38-2	ug/kg	2,550	6,470	No
618-1_Deep	non-Rad	Barium	7440-39-3	ug/kg	299,000	132,000	Yes
618-1_Deep	non-Rad	Beryllium	7440-41-7	ug/kg	218	1,510	No
618-1_Deep	non-Rad	Boron	7440-42-8	ug/kg	1,360	3,890	No
618-1_Deep	non-Rad	Cadmium	7440-43-9	ug/kg	263	563	No
618-1_Deep	non-Rad	Chromium	7440-47-3	ug/kg	7,740	18,500	No
618-1_Deep	non-Rad	Cobalt	7440-48-4	ug/kg	8,600	15,700	No
618-1_Deep	non-Rad	Copper	7440-50-8	ug/kg	46,300	22,000	Yes
618-1_Deep	non-Rad	Fluoride	16984-48-8	ug/kg	2,800	2,810	No
618-1_Deep	non-Rad	Iron	7439-89-6	ug/kg	2.47E+07	3.26E+07	No
618-1_Deep	non-Rad	Lead	7439-92-1	ug/kg	58,400	10,200	Yes
618-1_Deep	non-Rad	Lithium	7439-93-2	ug/kg	5,980	13,300	No
618-1_Deep	non-Rad	Manganese	7439-96-5	ug/kg	352,000	512,000	No
618-1_Deep	non-Rad	Mercury	7439-97-6	ug/kg	1,180	13	Yes
618-1_Deep	non-Rad	Molybdenum	7439-98-7	ug/kg	493	470	Yes
618-1_Deep	non-Rad	Nickel	7440-02-0	ug/kg	17,600	19,100	No
618-1_Deep	non-Rad	Nitrate	14797-55-8	ug/kg	1,700	52,000	No
618-1_Deep	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	ug/kg	220	--	--
618-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	89,439	3,210	Yes
618-1_Deep	non-Rad	Vanadium	7440-62-2	ug/kg	73,000	85,100	No
618-1_Deep	non-Rad	Zinc	7440-66-6	ug/kg	134,000	67,800	Yes
618-1_Deep	Rad	Cesium-137	10045-97-3	pCi/g	0.46	1.1	No
618-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	33	1.1	Yes
618-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	2.7	0.11	Yes
618-1_Deep	Rad	Uranium-238	U-238	pCi/g	32	1.1	Yes
618-1_Deep_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	8.57E+06	1.18E+07	No
618-1_Deep_Focused	non-Rad	Antimony	7440-36-0	ug/kg	407	130	Yes
618-1_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	1.24E+06	--	--
618-1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	99	--	--
618-1_Deep_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,580	6,470	No
618-1_Deep_Focused	non-Rad	Barium	7440-39-3	ug/kg	1.87E+06	132,000	Yes
618-1_Deep_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	323	1,510	No
618-1_Deep_Focused	non-Rad	Boron	7440-42-8	ug/kg	6,620	3,890	Yes
618-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	1,030	563	Yes
618-1_Deep_Focused	non-Rad	Chromium	7440-47-3	ug/kg	18,900	18,500	Yes
618-1_Deep_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,920	15,700	No
618-1_Deep_Focused	non-Rad	Copper	7440-50-8	ug/kg	68,700	22,000	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-1_Deep_Focused	non-Rad	Fluoride	16984-48-8	ug/kg	3,300	2,810	Yes
618-1_Deep_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.41E+07	3.26E+07	No
618-1_Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	333,000	10,200	Yes
618-1_Deep_Focused	non-Rad	Lithium	7439-93-2	ug/kg	8,450	13,300	No
618-1_Deep_Focused	non-Rad	Manganese	7439-96-5	ug/kg	351,000	512,000	No
618-1_Deep_Focused	non-Rad	Mercury	7439-97-6	ug/kg	8,940	13	Yes
618-1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	2,140	470	Yes
618-1_Deep_Focused	non-Rad	Nickel	7440-02-0	ug/kg	13,700	19,100	No
618-1_Deep_Focused	non-Rad	Nitrate	14797-55-8	ug/kg	11,900	52,000	No
618-1_Deep_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	ug/kg	1,560	--	--
618-1_Deep_Focused	non-Rad	Silver	7440-22-4	ug/kg	1,290	167	Yes
618-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	196,154	3,210	Yes
618-1_Deep_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	70,900	85,100	No
618-1_Deep_Focused	non-Rad	Zinc	7440-66-6	ug/kg	82,000	67,800	Yes
618-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	6.5	1.1	Yes
618-1_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	70	1.1	Yes
618-1_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.5	0.11	Yes
618-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	65	1.1	Yes
618-1_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.21E+06	1.18E+07	No
618-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	264	--	--
618-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	ug/kg	54	--	--
618-1_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,280	6,470	No
618-1_Shallow	non-Rad	Barium	7440-39-3	ug/kg	97,200	132,000	No
618-1_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	188	1,510	No
618-1_Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,190	3,890	No
618-1_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	68	563	No
618-1_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	7,930	18,500	No
618-1_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,360	15,700	No
618-1_Shallow	non-Rad	Copper	7440-50-8	ug/kg	11,400	22,000	No
618-1_Shallow	non-Rad	Fluoride	16984-48-8	ug/kg	400	2,810	No
618-1_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.05E+07	3.26E+07	No
618-1_Shallow	non-Rad	Lead	7439-92-1	ug/kg	3,100	10,200	No
618-1_Shallow	non-Rad	Lithium	7439-93-2	ug/kg	6,380	13,300	No
618-1_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	300,000	512,000	No
618-1_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	31	13	Yes
618-1_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	336	470	No
618-1_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	8,150	19,100	No
618-1_Shallow	non-Rad	Nitrate	14797-55-8	ug/kg	1,600	52,000	No
618-1_Shallow	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	ug/kg	300	--	--
618-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,224	3,210	Yes
618-1_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	56,300	85,100	No
618-1_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	42,100	67,800	No
618-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	1.1	Yes
618-1_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	1.1	Yes
618-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	1.22E+07	1.18E+07	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-1_Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	455	130	Yes
618-1_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	ug/kg	35	--	--
618-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	981	--	--
618-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	56	--	--
618-1_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	6,090	6,470	No
618-1_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	102,000	132,000	No
618-1_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	371	1,510	No
618-1_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	3,740	3,890	No
618-1_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	266	563	No
618-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	19,500	18,500	Yes
618-1_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	8,600	15,700	No
618-1_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	23,800	22,000	Yes
618-1_Shallow_Focused	non-Rad	Fluoride	16984-48-8	ug/kg	900	2,810	No
618-1_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.28E+07	3.26E+07	No
618-1_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	6,210	10,200	No
618-1_Shallow_Focused	non-Rad	Lithium	7439-93-2	ug/kg	13,300	13,300	No
618-1_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	403,000	512,000	No
618-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	198	13	Yes
618-1_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	356	470	No
618-1_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	16,800	19,100	No
618-1_Shallow_Focused	non-Rad	Nitrate	14797-55-8	ug/kg	3,800	52,000	No
618-1_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	ug/kg	260	--	--
618-1_Shallow_Focused	non-Rad	Silver	7440-22-4	ug/kg	1,120	167	Yes
618-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	24,957	3,210	Yes
618-1_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	64,700	85,100	No
618-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	68,100	67,800	Yes
618-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	1.1	Yes
618-1_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.99	0.11	Yes
618-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	8.2	1.1	Yes
618-12_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	8,557	6,470	Yes
618-12_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	63	--	--
618-12_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	60	--	--
618-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	32,092	3,210	Yes
618-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.47	0.11	Yes
618-12_Shallow	Rad	Uranium-238	U-238	pCi/g	11	1.1	Yes
618-13_Shallow	non-Rad	Acetone	67-64-1	ug/kg	8.6	--	--
618-13_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.34E+06	1.18E+07	No
618-13_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	312	130	Yes
618-13_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,500	6,470	No
618-13_Shallow	non-Rad	Barium	7440-39-3	ug/kg	74,000	132,000	No
618-13_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	212	1,510	No
618-13_Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,050	3,890	No
618-13_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	63	563	No
618-13_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,700	18,500	No
618-13_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,290	15,700	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-13_Shallow	non-Rad	Copper	7440-50-8	ug/kg	11,500	22,000	No
618-13_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.01E+07	3.26E+07	No
618-13_Shallow	non-Rad	Lead	7439-92-1	ug/kg	3,620	10,200	No
618-13_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	344,000	512,000	No
618-13_Shallow	non-Rad	Methylene chloride	75-09-2	ug/kg	5.1	--	--
618-13_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	420	470	No
618-13_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	12,400	19,100	No
618-13_Shallow	non-Rad	Tin	7440-31-5	ug/kg	1,050	--	--
618-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	5,061	3,210	Yes
618-13_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	55,800	85,100	No
618-13_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	41,400	67,800	No
618-13_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.038	1.1	No
618-13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	1.1	Yes
618-13_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	1.1	Yes
618-13_Shallow_Focused	non-Rad	Acetone	67-64-1	ug/kg	5.9	--	--
618-13_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	5.22E+06	1.18E+07	No
618-13_Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	233	130	Yes
618-13_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,390	6,470	No
618-13_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	57,700	132,000	No
618-13_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	184	1,510	No
618-13_Shallow_Focused	non-Rad	Boron	7440-42-8	ug/kg	960	3,890	No
618-13_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	47	563	No
618-13_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	8,740	18,500	No
618-13_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	5,710	15,700	No
618-13_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	10,100	22,000	No
618-13_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	ug/kg	150	--	--
618-13_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	1.79E+07	3.26E+07	No
618-13_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	4,940	10,200	No
618-13_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	268,000	512,000	No
618-13_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	ug/kg	5.0	--	--
618-13_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	ug/kg	297	470	No
618-13_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	10,000	19,100	No
618-13_Shallow_Focused	non-Rad	Tin	7440-31-5	ug/kg	745	--	--
618-13_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,855	3,210	No
618-13_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	48,600	85,100	No
618-13_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	37,100	67,800	No
618-13_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	1.1	Yes
618-13_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	0.96	1.1	No
618-2_Deep	non-Rad	Arsenic	7440-38-2	ug/kg	1,500	6,470	No
618-2_Deep	non-Rad	Barium	7440-39-3	ug/kg	83,300	132,000	No
618-2_Deep	non-Rad	Chromium	7440-47-3	ug/kg	6,700	18,500	No
618-2_Deep	non-Rad	Lead	7439-92-1	ug/kg	6,600	10,200	No
618-2_Deep	non-Rad	Selenium	7782-49-2	ug/kg	780	780	No
618-2_Deep	non-Rad	Tin	7440-31-5	ug/kg	2,900	--	--
618-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	491,176	3,210	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	7.9	--	--
618-2_Deep	Rad	Cesium-137	10045-97-3	pCi/g	1.0	1.1	No
618-2_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	1.5	0.0038	Yes
618-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	91	0.025	Yes
618-2_Deep	Rad	Plutonium-241	14119-32-5	pCi/g	42	--	--
618-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	12	0.18	Yes
618-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	161	1.1	Yes
618-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.78	0.11	Yes
618-2_Deep	Rad	Uranium-238	U-238	pCi/g	165	1.1	Yes
618-2_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	6.9	--	--
618-2_Deep_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,300	6,470	No
618-2_Deep_Focused	non-Rad	Barium	7440-39-3	ug/kg	109,000	132,000	No
618-2_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	27	--	--
618-2_Deep_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	200	563	No
618-2_Deep_Focused	non-Rad	Chromium	7440-47-3	ug/kg	10,400	18,500	No
618-2_Deep_Focused	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	18	--	--
618-2_Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	6,800	10,200	No
618-2_Deep_Focused	non-Rad	Selenium	7782-49-2	ug/kg	1,200	780	Yes
618-2_Deep_Focused	non-Rad	Silver	7440-22-4	ug/kg	600	167	Yes
618-2_Deep_Focused	non-Rad	Tin	7440-31-5	ug/kg	42,500	--	--
618-2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	150,259	3,210	Yes
618-2_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	9.2	--	--
618-2_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.1	1.1	Yes
618-2_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	1.6	0.0038	Yes
618-2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	92	0.025	Yes
618-2_Deep_Focused	Rad	Plutonium-241	14119-32-5	pCi/g	33	--	--
618-2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	0.18	Yes
618-2_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	48	1.1	Yes
618-2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	2.4	0.11	Yes
618-2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	50	1.1	Yes
618-2_Overburden	non-Rad	Arsenic	7440-38-2	ug/kg	2,700	6,470	No
618-2_Overburden	non-Rad	Barium	7440-39-3	ug/kg	74,700	132,000	No
618-2_Overburden	non-Rad	Chromium	7440-47-3	ug/kg	6,600	18,500	No
618-2_Overburden	non-Rad	Lead	7439-92-1	ug/kg	4,300	10,200	No
618-2_Overburden	non-Rad	Selenium	7782-49-2	ug/kg	1,000	780	Yes
618-2_Overburden	non-Rad	Tin	7440-31-5	ug/kg	2,700	--	--
618-2_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,749	3,210	No
618-2_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.058	1.1	No
618-2_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.64	1.1	No
618-2_Overburden	Rad	Uranium-238	U-238	pCi/g	0.59	1.1	No
618-2_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	1,900	6,470	No
618-2_Shallow	non-Rad	Barium	7440-39-3	ug/kg	79,100	132,000	No
618-2_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	7,100	18,500	No
618-2_Shallow	non-Rad	Lead	7439-92-1	ug/kg	5,600	10,200	No
618-2_Shallow	non-Rad	Selenium	7782-49-2	ug/kg	760	780	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-2_Shallow	non-Rad	Tin	7440-31-5	ug/kg	2,400	--	--
618-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	5,852	3,210	Yes
618-2_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.81	--	--
618-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.2	1.1	Yes
618-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	7.7	0.025	Yes
618-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.2	1.1	Yes
618-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.21	0.11	Yes
618-2_Shallow	Rad	Uranium-238	U-238	pCi/g	2.2	1.1	Yes
618-2_Staging Pile	non-Rad	Arsenic	7440-38-2	ug/kg	3,063	6,470	No
618-2_Staging Pile	non-Rad	Barium	7440-39-3	ug/kg	67,690	132,000	No
618-2_Staging Pile	non-Rad	Chromium	7440-47-3	ug/kg	6,424	18,500	No
618-2_Staging Pile	non-Rad	Lead	7439-92-1	ug/kg	4,011	10,200	No
618-2_Staging Pile	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	9,201	3,210	Yes
618-2_Staging Pile	Rad	Americium-241	14596-10-2	pCi/g	0.82	--	--
618-2_Staging Pile	Rad	Cesium-137	10045-97-3	pCi/g	0.095	1.1	No
618-2_Staging Pile	Rad	Plutonium-239/240	PU-239/240	pCi/g	10	0.025	Yes
618-2_Staging Pile	Rad	Tritium	10028-17-8	pCi/g	2.3	--	--
618-2_Staging Pile	Rad	Uranium-233/234	U-233/234	pCi/g	2.0	1.1	Yes
618-2_Staging Pile	Rad	Uranium-235	15117-96-1	pCi/g	0.12	0.11	Yes
618-2_Staging Pile	Rad	Uranium-238	U-238	pCi/g	2.0	1.1	Yes
618-3_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,800	6,470	No
618-3_Shallow	non-Rad	Barium	7440-39-3	ug/kg	76,500	132,000	No
618-3_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	9,700	18,500	No
618-3_Shallow	non-Rad	Lead	7439-92-1	ug/kg	3,900	10,200	No
618-3_Shallow	non-Rad	Selenium	7782-49-2	ug/kg	659	780	No
618-3_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,224	3,210	No
618-3_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.68	1.1	No
618-3_Shallow	Rad	Uranium-238	U-238	pCi/g	0.75	1.1	No
618-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	238,577	3,210	Yes
618-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	80	1.1	Yes
618-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.8	0.11	Yes
618-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	79	1.1	Yes
618-4_Deep	non-Rad	Arsenic	7440-38-2	ug/kg	2,200	6,470	No
618-4_Deep	non-Rad	Lead	7439-92-1	ug/kg	20,000	10,200	Yes
618-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	64,506	3,210	Yes
618-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	20	1.1	Yes
618-4_Deep	Rad	Uranium-235	15117-96-1	pCi/g	1.1	0.11	Yes
618-4_Deep	Rad	Uranium-238	U-238	pCi/g	22	1.1	Yes
618-4_Deep_Focused	non-Rad	2-Butanone	78-93-3	ug/kg	130	--	--
618-4_Deep_Focused	non-Rad	Acetone	67-64-1	ug/kg	16	--	--
618-4_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	1,600	--	--
618-4_Deep_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	2,700	6,470	No
618-4_Deep_Focused	non-Rad	Barium	7440-39-3	ug/kg	104,000	132,000	No
618-4_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	4,700	--	--
618-4_Deep_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	1,500	563	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-4_Deep_Focused	non-Rad	Chromium	7440-47-3	ug/kg	27,700	18,500	Yes
618-4_Deep_Focused	non-Rad	Diethyl ether	60-29-7	ug/kg	1.0	--	--
618-4_Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	24,900	10,200	Yes
618-4_Deep_Focused	non-Rad	Methylene chloride	75-09-2	ug/kg	40	--	--
618-4_Deep_Focused	non-Rad	Phenol	108-95-2	ug/kg	110	--	--
618-4_Deep_Focused	non-Rad	Tetrachloroethene	127-18-4	ug/kg	24	--	--
618-4_Deep_Focused	non-Rad	Toluene	108-88-3	ug/kg	4.8	--	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	ug/kg	34,000	--	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	ug/kg	42,000	--	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling	TPH/OILH	ug/kg	65	--	--
618-4_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	20,777	3,210	Yes
618-4_Deep_Focused	non-Rad	Trichloroethene	79-01-6	ug/kg	2.0	--	--
618-4_Deep_Focused	non-Rad	Trichloromonofluoromethane	75-69-4	ug/kg	12	--	--
618-4_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	7.2	1.1	Yes
618-4_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.51	0.11	Yes
618-4_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	6.9	1.1	Yes
618-4_Overburden_2	non-Rad	Arsenic	7440-38-2	ug/kg	2,500	6,470	No
618-4_Overburden_2	non-Rad	Lead	7439-92-1	ug/kg	4,700	10,200	No
618-4_Overburden_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,197	3,210	Yes
618-4_Overburden_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	1.1	Yes
618-4_Overburden_2	Rad	Uranium-238	U-238	pCi/g	1.4	1.1	Yes
618-4_Overburden_3	non-Rad	Lead	7439-92-1	ug/kg	5,000	10,200	No
618-4_Overburden_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,171	3,210	No
618-4_Overburden_3	Rad	Uranium-233/234	U-233/234	pCi/g	0.42	1.1	No
618-4_Overburden_3	Rad	Uranium-235	15117-96-1	pCi/g	0.032	0.11	No
618-4_Overburden_3	Rad	Uranium-238	U-238	pCi/g	0.44	1.1	No
618-4_Overburden_4	non-Rad	Lead	7439-92-1	ug/kg	4,800	10,200	No
618-4_Overburden_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,323	3,210	No
618-4_Overburden_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.94	1.1	No
618-4_Overburden_4	Rad	Uranium-238	U-238	pCi/g	0.94	1.1	No
618-4_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,200	6,470	No
618-4_Shallow	non-Rad	Lead	7439-92-1	ug/kg	49,000	10,200	Yes
618-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	7,456	3,210	Yes
618-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	3.2	1.1	Yes
618-4_Shallow	Rad	Uranium-238	U-238	pCi/g	3.1	1.1	Yes
618-5_Deep	non-Rad	Arsenic	7440-38-2	ug/kg	5,200	6,470	No
618-5_Deep	non-Rad	Cadmium	7440-43-9	ug/kg	470	563	No
618-5_Deep	non-Rad	Chromium	7440-47-3	ug/kg	14,700	18,500	No
618-5_Deep	non-Rad	Lead	7439-92-1	ug/kg	82,300	10,200	Yes
618-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	26,618	3,210	Yes
618-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	8.6	1.1	Yes
618-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.46	0.11	Yes
618-5_Deep	Rad	Uranium-238	U-238	pCi/g	8.9	1.1	Yes
618-5_Deep_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.65E+06	1.18E+07	No
618-5_Deep_Focused	non-Rad	Antimony	7440-36-0	ug/kg	1,800	130	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-5_Deep_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	3,500	6,470	No
618-5_Deep_Focused	non-Rad	Barium	7440-39-3	ug/kg	106,000	132,000	No
618-5_Deep_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	672	1,510	No
618-5_Deep_Focused	non-Rad	Chromium	7440-47-3	ug/kg	6,500	18,500	No
618-5_Deep_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	10,500	15,700	No
618-5_Deep_Focused	non-Rad	Copper	7440-50-8	ug/kg	21,400	22,000	No
618-5_Deep_Focused	non-Rad	Iron	7439-89-6	ug/kg	3.02E+07	3.26E+07	No
618-5_Deep_Focused	non-Rad	Lead	7439-92-1	ug/kg	6,600	10,200	No
618-5_Deep_Focused	non-Rad	Manganese	7439-96-5	ug/kg	579,000	512,000	Yes
618-5_Deep_Focused	non-Rad	Mercury	7439-97-6	ug/kg	33	13	Yes
618-5_Deep_Focused	non-Rad	Nickel	7440-02-0	ug/kg	11,300	19,100	No
618-5_Deep_Focused	non-Rad	Selenium	7782-49-2	ug/kg	2,270	780	Yes
618-5_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	36,540	3,210	Yes
618-5_Deep_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	79,500	85,100	No
618-5_Deep_Focused	non-Rad	Zinc	7440-66-6	ug/kg	65,800	67,800	No
618-5_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	1.1	Yes
618-5_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.48	0.11	Yes
618-5_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	12	1.1	Yes
618-5_Overburden	non-Rad	Arsenic	7440-38-2	ug/kg	3,400	6,470	No
618-5_Overburden	non-Rad	Cadmium	7440-43-9	ug/kg	170	563	No
618-5_Overburden	non-Rad	Chromium	7440-47-3	ug/kg	9,700	18,500	No
618-5_Overburden	non-Rad	Lead	7439-92-1	ug/kg	7,500	10,200	No
618-5_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	9,773	3,210	Yes
618-5_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	4.1	1.1	Yes
618-5_Overburden	Rad	Uranium-238	U-238	pCi/g	4.6	1.1	Yes
618-5_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,300	6,470	No
618-5_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	11,300	18,500	No
618-5_Shallow	non-Rad	Lead	7439-92-1	ug/kg	6,100	10,200	No
618-5_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,849	3,210	No
618-5_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	0.94	1.1	No
618-5_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	1.1	No
618-5_Staging Pile_4	non-Rad	Arsenic	7440-38-2	ug/kg	3,300	6,470	No
618-5_Staging Pile_4	non-Rad	Cadmium	7440-43-9	ug/kg	50	563	No
618-5_Staging Pile_4	non-Rad	Chromium	7440-47-3	ug/kg	11,800	18,500	No
618-5_Staging Pile_4	non-Rad	Lead	7439-92-1	ug/kg	5,300	10,200	No
618-5_Staging Pile_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,364	3,210	Yes
618-5_Staging Pile_4	Rad	Uranium-233/234	U-233/234	pCi/g	1.2	1.1	Yes
618-5_Staging Pile_4	Rad	Uranium-238	U-238	pCi/g	1.1	1.1	Yes
618-5_Staging Pile_5	non-Rad	Arsenic	7440-38-2	ug/kg	2,700	6,470	No
618-5_Staging Pile_5	non-Rad	Chromium	7440-47-3	ug/kg	10,300	18,500	No
618-5_Staging Pile_5	non-Rad	Lead	7439-92-1	ug/kg	3,900	10,200	No
618-5_Staging Pile_5	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,326	3,210	Yes
618-5_Staging Pile_5	Rad	Uranium-233/234	U-233/234	pCi/g	1.5	1.1	Yes
618-5_Staging Pile_5	Rad	Uranium-235	15117-96-1	pCi/g	0.17	0.11	Yes
618-5_Staging Pile_5	Rad	Uranium-238	U-238	pCi/g	1.7	1.1	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-7_Shallow_1	non-Rad	Aluminum	7429-90-5	ug/kg	5.25E+06	1.18E+07	No
618-7_Shallow_1	non-Rad	Antimony	7440-36-0	ug/kg	560	130	Yes
618-7_Shallow_1	non-Rad	Arsenic	7440-38-2	ug/kg	1,891	6,470	No
618-7_Shallow_1	non-Rad	Barium	7440-39-3	ug/kg	68,874	132,000	No
618-7_Shallow_1	non-Rad	Beryllium	7440-41-7	ug/kg	278	1,510	No
618-7_Shallow_1	non-Rad	Cadmium	7440-43-9	ug/kg	65	563	No
618-7_Shallow_1	non-Rad	Chromium	7440-47-3	ug/kg	10,227	18,500	No
618-7_Shallow_1	non-Rad	Cobalt	7440-48-4	ug/kg	9,152	15,700	No
618-7_Shallow_1	non-Rad	Copper	7440-50-8	ug/kg	16,120	22,000	No
618-7_Shallow_1	non-Rad	Iron	7439-89-6	ug/kg	2.60E+07	3.26E+07	No
618-7_Shallow_1	non-Rad	Lead	7439-92-1	ug/kg	14,567	10,200	Yes
618-7_Shallow_1	non-Rad	Manganese	7439-96-5	ug/kg	326,067	512,000	No
618-7_Shallow_1	non-Rad	Mercury	7439-97-6	ug/kg	44	13	Yes
618-7_Shallow_1	non-Rad	Nickel	7440-02-0	ug/kg	20,977	19,100	Yes
618-7_Shallow_1	non-Rad	Tin	7440-31-5	ug/kg	1,547	--	--
618-7_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	10,814	3,210	Yes
618-7_Shallow_1	non-Rad	Vanadium	7440-62-2	ug/kg	74,576	85,100	No
618-7_Shallow_1	non-Rad	Zinc	7440-66-6	ug/kg	49,177	67,800	No
618-7_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	0.067	1.1	No
618-7_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	3.6	1.1	Yes
618-7_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.36	0.11	Yes
618-7_Shallow_1	Rad	Uranium-238	U-238	pCi/g	3.6	1.1	Yes
618-7_Shallow_2	non-Rad	Aluminum	7429-90-5	ug/kg	4.97E+06	1.18E+07	No
618-7_Shallow_2	non-Rad	Antimony	7440-36-0	ug/kg	660	130	Yes
618-7_Shallow_2	non-Rad	Arsenic	7440-38-2	ug/kg	2,500	6,470	No
618-7_Shallow_2	non-Rad	Barium	7440-39-3	ug/kg	73,800	132,000	No
618-7_Shallow_2	non-Rad	Beryllium	7440-41-7	ug/kg	440	1,510	No
618-7_Shallow_2	non-Rad	Chromium	7440-47-3	ug/kg	6,800	18,500	No
618-7_Shallow_2	non-Rad	Cobalt	7440-48-4	ug/kg	9,300	15,700	No
618-7_Shallow_2	non-Rad	Copper	7440-50-8	ug/kg	13,600	22,000	No
618-7_Shallow_2	non-Rad	Iron	7439-89-6	ug/kg	2.60E+07	3.26E+07	No
618-7_Shallow_2	non-Rad	Lead	7439-92-1	ug/kg	2,800	10,200	No
618-7_Shallow_2	non-Rad	Manganese	7439-96-5	ug/kg	364,000	512,000	No
618-7_Shallow_2	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes
618-7_Shallow_2	non-Rad	Nickel	7440-02-0	ug/kg	9,700	19,100	No
618-7_Shallow_2	non-Rad	Tin	7440-31-5	ug/kg	1,500	--	--
618-7_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,574	3,210	No
618-7_Shallow_2	non-Rad	Vanadium	7440-62-2	ug/kg	74,700	85,100	No
618-7_Shallow_2	non-Rad	Zinc	7440-66-6	ug/kg	46,200	67,800	No
618-7_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	0.57	1.1	No
618-7_Shallow_2	Rad	Uranium-238	U-238	pCi/g	0.53	1.1	No
618-7_Shallow_3	non-Rad	Aluminum	7429-90-5	ug/kg	6.74E+06	1.18E+07	No
618-7_Shallow_3	non-Rad	Antimony	7440-36-0	ug/kg	450	130	Yes
618-7_Shallow_3	non-Rad	Arsenic	7440-38-2	ug/kg	2,800	6,470	No
618-7_Shallow_3	non-Rad	Barium	7440-39-3	ug/kg	82,500	132,000	No

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-7_Shallow_3	non-Rad	Beryllium	7440-41-7	ug/kg	310	1,510	No
618-7_Shallow_3	non-Rad	Cadmium	7440-43-9	ug/kg	190	563	No
618-7_Shallow_3	non-Rad	Chromium	7440-47-3	ug/kg	10,100	18,500	No
618-7_Shallow_3	non-Rad	Cobalt	7440-48-4	ug/kg	8,600	15,700	No
618-7_Shallow_3	non-Rad	Copper	7440-50-8	ug/kg	13,600	22,000	No
618-7_Shallow_3	non-Rad	Iron	7439-89-6	ug/kg	2.43E+07	3.26E+07	No
618-7_Shallow_3	non-Rad	Lead	7439-92-1	ug/kg	4,300	10,200	No
618-7_Shallow_3	non-Rad	Manganese	7439-96-5	ug/kg	357,000	512,000	No
618-7_Shallow_3	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes
618-7_Shallow_3	non-Rad	Nickel	7440-02-0	ug/kg	10,100	19,100	No
618-7_Shallow_3	non-Rad	Tin	7440-31-5	ug/kg	1,800	--	--
618-7_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,852	3,210	No
618-7_Shallow_3	non-Rad	Vanadium	7440-62-2	ug/kg	68,200	85,100	No
618-7_Shallow_3	non-Rad	Zinc	7440-66-6	ug/kg	44,500	67,800	No
618-7_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	1.1	No
618-7_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.085	0.11	No
618-7_Shallow_3	Rad	Uranium-238	U-238	pCi/g	0.95	1.1	No
618-7_Shallow_4	non-Rad	Aluminum	7429-90-5	ug/kg	5.65E+06	1.18E+07	No
618-7_Shallow_4	non-Rad	Antimony	7440-36-0	ug/kg	250	130	Yes
618-7_Shallow_4	non-Rad	Arsenic	7440-38-2	ug/kg	5,200	6,470	No
618-7_Shallow_4	non-Rad	Barium	7440-39-3	ug/kg	57,900	132,000	No
618-7_Shallow_4	non-Rad	Beryllium	7440-41-7	ug/kg	220	1,510	No
618-7_Shallow_4	non-Rad	Cadmium	7440-43-9	ug/kg	90	563	No
618-7_Shallow_4	non-Rad	Chromium	7440-47-3	ug/kg	11,400	18,500	No
618-7_Shallow_4	non-Rad	Cobalt	7440-48-4	ug/kg	6,700	15,700	No
618-7_Shallow_4	non-Rad	Copper	7440-50-8	ug/kg	13,200	22,000	No
618-7_Shallow_4	non-Rad	Iron	7439-89-6	ug/kg	2.12E+07	3.26E+07	No
618-7_Shallow_4	non-Rad	Lead	7439-92-1	ug/kg	3,000	10,200	No
618-7_Shallow_4	non-Rad	Manganese	7439-96-5	ug/kg	285,000	512,000	No
618-7_Shallow_4	non-Rad	Nickel	7440-02-0	ug/kg	12,900	19,100	No
618-7_Shallow_4	non-Rad	Tin	7440-31-5	ug/kg	710	--	--
618-7_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,064	3,210	No
618-7_Shallow_4	non-Rad	Vanadium	7440-62-2	ug/kg	54,800	85,100	No
618-7_Shallow_4	non-Rad	Zinc	7440-66-6	ug/kg	37,000	67,800	No
618-7_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	0.69	1.1	No
618-7_Shallow_4	Rad	Uranium-238	U-238	pCi/g	0.76	1.1	No
618-7_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	ug/kg	150	--	--
618-7_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	7.61E+06	1.18E+07	No
618-7_Shallow_Focused	non-Rad	Antimony	7440-36-0	ug/kg	980	130	Yes
618-7_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	ug/kg	6.7	--	--
618-7_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	4,200	6,470	No
618-7_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	92,800	132,000	No
618-7_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	ug/kg	88	--	--
618-7_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	66	--	--
618-7_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	52	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-7_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	ug/kg	11	--	--
618-7_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	370	1,510	No
618-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	470	--	--
618-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	ug/kg	6,200	563	Yes
618-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	65,900	18,500	Yes
618-7_Shallow_Focused	non-Rad	Chrysene	218-01-9	ug/kg	69	--	--
618-7_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	11,000	15,700	No
618-7_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	25,000	22,000	Yes
618-7_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	ug/kg	45	--	--
618-7_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	33	--	--
618-7_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	ug/kg	48	--	--
618-7_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.87E+07	3.26E+07	No
618-7_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	6,500	10,200	No
618-7_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	425,000	512,000	No
618-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	20	13	Yes
618-7_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	17,200	19,100	No
618-7_Shallow_Focused	non-Rad	Pyrene	129-00-0	ug/kg	410	--	--
618-7_Shallow_Focused	non-Rad	Tin	7440-31-5	ug/kg	1,200	--	--
618-7_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling	TPH/OILH	ug/kg	680,000	--	--
618-7_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	19,563	3,210	Yes
618-7_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	80,500	85,100	No
618-7_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	52,400	67,800	No
618-7_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	0.010	1.1	No
618-7_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	1.1	Yes
618-7_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.97	0.11	Yes
618-7_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	6.4	1.1	Yes
618-8_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	4,100	6,470	No
618-8_Shallow	non-Rad	Barium	7440-39-3	ug/kg	97,600	132,000	No
618-8_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	12,400	18,500	No
618-8_Shallow	non-Rad	Lead	7439-92-1	ug/kg	5,100	10,200	No
618-8_Shallow	non-Rad	Selenium	7782-49-2	ug/kg	846	780	Yes
618-8_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	1,935	3,210	No
618-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.2	1.1	Yes
618-8_Shallow	Rad	Uranium-238	U-238	pCi/g	0.73	1.1	No
618-9_Shallow_Focused	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	110	--	--
618-9_Shallow_Focused	non-Rad	Acetone	67-64-1	ug/kg	680	--	--
618-9_Shallow_Focused	non-Rad	Aldrin	309-00-2	ug/kg	390	--	--
618-9_Shallow_Focused	non-Rad	Aluminum	7429-90-5	ug/kg	8.57E+06	1.18E+07	No
618-9_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	ug/kg	1,900	--	--
618-9_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	ug/kg	1,900	--	--
618-9_Shallow_Focused	non-Rad	Aroclor-1232	11141-16-5	ug/kg	1,900	--	--
618-9_Shallow_Focused	non-Rad	Aroclor-1242	53469-21-9	ug/kg	1,900	--	--
618-9_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	ug/kg	1,900	--	--
618-9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	ug/kg	3,900	--	--
618-9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	ug/kg	3,900	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
618-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	ug/kg	11,600	6,470	Yes
618-9_Shallow_Focused	non-Rad	Barium	7440-39-3	ug/kg	90,200	132,000	No
618-9_Shallow_Focused	non-Rad	Beryllium	7440-41-7	ug/kg	330	1,510	No
618-9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	5,200	--	--
618-9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	ug/kg	2,700	--	--
618-9_Shallow_Focused	non-Rad	Chlordane	57-74-9	ug/kg	69	--	--
618-9_Shallow_Focused	non-Rad	Chloroform	67-66-3	ug/kg	9.0	--	--
618-9_Shallow_Focused	non-Rad	Chromium	7440-47-3	ug/kg	9,700	18,500	No
618-9_Shallow_Focused	non-Rad	Cobalt	7440-48-4	ug/kg	11,400	15,700	No
618-9_Shallow_Focused	non-Rad	Copper	7440-50-8	ug/kg	16,700	22,000	No
618-9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	ug/kg	7,200	--	--
618-9_Shallow_Focused	non-Rad	Heptachlor epoxide	1024-57-3	ug/kg	44	--	--
618-9_Shallow_Focused	non-Rad	Hexachlorobutadiene	87-68-3	ug/kg	760	--	--
618-9_Shallow_Focused	non-Rad	Hexachloroethane	67-72-1	ug/kg	17,000	--	--
618-9_Shallow_Focused	non-Rad	Iron	7439-89-6	ug/kg	2.49E+07	3.26E+07	No
618-9_Shallow_Focused	non-Rad	Lead	7439-92-1	ug/kg	7,700	10,200	No
618-9_Shallow_Focused	non-Rad	Manganese	7439-96-5	ug/kg	359,000	512,000	No
618-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	ug/kg	330	13	Yes
618-9_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	ug/kg	2,300	--	--
618-9_Shallow_Focused	non-Rad	Nickel	7440-02-0	ug/kg	10,600	19,100	No
618-9_Shallow_Focused	non-Rad	Nitrate	14797-55-8	ug/kg	1.67E+06	52,000	Yes
618-9_Shallow_Focused	non-Rad	Tetrachloroethene	127-18-4	ug/kg	920	--	--
618-9_Shallow_Focused	non-Rad	Toluene	108-88-3	ug/kg	9.0	--	--
618-9_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	8962.9	3210	Yes
618-9_Shallow_Focused	non-Rad	Trichloroethene	79-01-6	ug/kg	0.002	--	--
618-9_Shallow_Focused	non-Rad	Vanadium	7440-62-2	ug/kg	59,300	85,100	No
618-9_Shallow_Focused	non-Rad	Zinc	7440-66-6	ug/kg	52,300	67,800	No
618-9_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.071	0.11	No
618-9_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	3.0	1.1	Yes
628-4_Overburden	non-Rad	Arsenic	7440-38-2	ug/kg	3,374	6,470	No
628-4_Overburden	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	ug/kg	61	--	--
628-4_Overburden	non-Rad	Lead	7439-92-1	ug/kg	7,284	10,200	No
628-4_Overburden	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	2,308	3,210	No
628-4_Overburden	Rad	Cesium-137	10045-97-3	pCi/g	0.033	1.1	No
628-4_Overburden	Rad	Uranium-233/234	U-233/234	pCi/g	0.87	1.1	No
628-4_Overburden	Rad	Uranium-238	U-238	pCi/g	0.78	1.1	No
628-4_Shallow	non-Rad	Aroclor-1242	53469-21-9	ug/kg	42	--	--
628-4_Shallow	non-Rad	Aroclor-1248	12672-29-6	ug/kg	1,115	--	--
628-4_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	243	--	--
628-4_Shallow	non-Rad	Aroclor-1260	11096-82-5	ug/kg	38	--	--
628-4_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	3,864	6,470	No
628-4_Shallow	non-Rad	Lead	7439-92-1	ug/kg	99,167	10,200	Yes
628-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	3,163	3,210	No
628-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	1.1	Yes
628-4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.11	0.11	Yes

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
628-4_Shallow	Rad	Uranium-238	U-238	pCi/g	1.0	1.1	No
UPR-300-17_Shallow	non-Rad	Acenaphthene	83-32-9	ug/kg	117	--	--
UPR-300-17_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.34E+06	1.18E+07	No
UPR-300-17_Shallow	non-Rad	Anthracene	120-12-7	ug/kg	7.0	--	--
UPR-300-17_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	359	130	Yes
UPR-300-17_Shallow	non-Rad	Aroclor-1248	12672-29-6	ug/kg	1,970	--	--
UPR-300-17_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	450	--	--
UPR-300-17_Shallow	non-Rad	Aroclor-1260	11096-82-5	ug/kg	113	--	--
UPR-300-17_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,573	6,470	No
UPR-300-17_Shallow	non-Rad	Barium	7440-39-3	ug/kg	81,014	132,000	No
UPR-300-17_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	ug/kg	59	--	--
UPR-300-17_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	44	--	--
UPR-300-17_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	33	--	--
UPR-300-17_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	ug/kg	9.9	--	--
UPR-300-17_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	240	1,510	No
UPR-300-17_Shallow	non-Rad	Boron	7440-42-8	ug/kg	3,903	3,890	Yes
UPR-300-17_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	173	563	No
UPR-300-17_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	13,795	18,500	No
UPR-300-17_Shallow	non-Rad	Chrysene	218-01-9	ug/kg	39	--	--
UPR-300-17_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,688	15,700	No
UPR-300-17_Shallow	non-Rad	Copper	7440-50-8	ug/kg	15,135	22,000	No
UPR-300-17_Shallow	non-Rad	Fluoranthene	206-44-0	ug/kg	35	--	--
UPR-300-17_Shallow	non-Rad	Fluorene	86-73-7	ug/kg	2.9	--	--
UPR-300-17_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	5.9	--	--
UPR-300-17_Shallow	non-Rad	Iron	7439-89-6	ug/kg	1.90E+07	3.26E+07	No
UPR-300-17_Shallow	non-Rad	Lead	7439-92-1	ug/kg	11,240	10,200	Yes
UPR-300-17_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	285,159	512,000	No
UPR-300-17_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	69	13	Yes
UPR-300-17_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	412	470	No
UPR-300-17_Shallow	non-Rad	Naphthalene	91-20-3	ug/kg	48	--	--
UPR-300-17_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	563,654	19,100	Yes
UPR-300-17_Shallow	non-Rad	Pyrene	129-00-0	ug/kg	34	--	--
UPR-300-17_Shallow	non-Rad	Silver	7440-22-4	ug/kg	340	167	Yes
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	ug/kg	2,950	--	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling	TPH/OILH	ug/kg	210,420	--	--
UPR-300-17_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	12,420	3,210	Yes
UPR-300-17_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	52,150	85,100	No
UPR-300-17_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	157,172	67,800	Yes
UPR-300-17_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	6.1	1.1	Yes
UPR-300-17_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.91	0.11	Yes
UPR-300-17_Shallow	Rad	Uranium-238	U-238	pCi/g	4.0	1.1	Yes
UPR-300-46_Shallow	non-Rad	Acenaphthene	83-32-9	ug/kg	13	--	--
UPR-300-46_Shallow	non-Rad	Aluminum	7429-90-5	ug/kg	6.80E+06	1.18E+07	No
UPR-300-46_Shallow	non-Rad	Antimony	7440-36-0	ug/kg	381	130	Yes
UPR-300-46_Shallow	non-Rad	Aroclor-1248	12672-29-6	ug/kg	879	--	--

Table 7-3. Comparison of EPCs for Waste Site Decision Units in 300 Area Source OU to Hanford Site Soil Background Values

Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Lognormal 90th Percentile Background Value	Is EPC > Background?
UPR-300-46_Shallow	non-Rad	Aroclor-1254	11097-69-1	ug/kg	490	--	--
UPR-300-46_Shallow	non-Rad	Aroclor-1260	11096-82-5	ug/kg	84	--	--
UPR-300-46_Shallow	non-Rad	Arsenic	7440-38-2	ug/kg	2,846	6,470	No
UPR-300-46_Shallow	non-Rad	Barium	7440-39-3	ug/kg	82,137	132,000	No
UPR-300-46_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	ug/kg	3.9	--	--
UPR-300-46_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	ug/kg	3.4	--	--
UPR-300-46_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	ug/kg	5.4	--	--
UPR-300-46_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	ug/kg	2.8	--	--
UPR-300-46_Shallow	non-Rad	Beryllium	7440-41-7	ug/kg	222	1,510	No
UPR-300-46_Shallow	non-Rad	Boron	7440-42-8	ug/kg	1,714	3,890	No
UPR-300-46_Shallow	non-Rad	Cadmium	7440-43-9	ug/kg	95	563	No
UPR-300-46_Shallow	non-Rad	Chromium	7440-47-3	ug/kg	10,173	18,500	No
UPR-300-46_Shallow	non-Rad	Chrysene	218-01-9	ug/kg	5.6	--	--
UPR-300-46_Shallow	non-Rad	Cobalt	7440-48-4	ug/kg	6,361	15,700	No
UPR-300-46_Shallow	non-Rad	Copper	7440-50-8	ug/kg	13,151	22,000	No
UPR-300-46_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	ug/kg	1.3	--	--
UPR-300-46_Shallow	non-Rad	Fluoranthene	206-44-0	ug/kg	9.6	--	--
UPR-300-46_Shallow	non-Rad	Fluorene	86-73-7	ug/kg	2.2	--	--
UPR-300-46_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	ug/kg	7.6	--	--
UPR-300-46_Shallow	non-Rad	Iron	7439-89-6	ug/kg	2.05E+07	3.26E+07	No
UPR-300-46_Shallow	non-Rad	Lead	7439-92-1	ug/kg	7,105	10,200	No
UPR-300-46_Shallow	non-Rad	Manganese	7439-96-5	ug/kg	311,001	512,000	No
UPR-300-46_Shallow	non-Rad	Mercury	7439-97-6	ug/kg	29	13	Yes
UPR-300-46_Shallow	non-Rad	Molybdenum	7439-98-7	ug/kg	456	470	No
UPR-300-46_Shallow	non-Rad	Naphthalene	91-20-3	ug/kg	36	--	--
UPR-300-46_Shallow	non-Rad	Nickel	7440-02-0	ug/kg	9,230	19,100	No
UPR-300-46_Shallow	non-Rad	Pyrene	129-00-0	ug/kg	4.4	--	--
UPR-300-46_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	ug/kg	4,897	3,210	Yes
UPR-300-46_Shallow	non-Rad	Vanadium	7440-62-2	ug/kg	53,808	85,100	No
UPR-300-46_Shallow	non-Rad	Zinc	7440-66-6	ug/kg	47,945	67,800	No
UPR-300-46_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	0.070	1.1	No
UPR-300-46_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.8	1.1	Yes
UPR-300-46_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	0.11	Yes
UPR-300-46_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	1.1	Yes

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Laguna and 95th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
300 ASH PITS_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	52	91,112	50.0	1,822	0	1.65E-02	1,822	Scaled GWP SSL	No [h]
300 ASH PITS_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	96	--[b]	50.0	--	0	3.30E-01	--	Scaled GWP SSL	--
300 ASH PITS_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	76	8.41E+06	50.0	168,187	0	3.30E-01	168,187	Scaled GWP SSL	No
300-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	13,500	20,000[d]	38.6	20,000	6,470	1.00E+00	20,000	Scaled GWP SSL	No
300-10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	200	--[b]	38.6	--	0	3.30E-01	--	Scaled GWP SSL	--
300-10_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	230	8.41E+06	38.6	217,859	0	3.30E-01	217,859	Scaled GWP SSL	No
300-10_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,078	101,630[f]	38.6	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-10_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	--[d]	38.6	--	1	1.00E+00	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	122	--[b]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	40	--[b]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.2	--[b]	1.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.3	--[b]	1.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.8	--[b]	1.0	--	0	1.00E-01	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	14	--[b]	1.0	--	0	3.00E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	22	1.41E+06	1.0	1,408,526	13	2.50E+00	1,408,526	Scaled GWP SSL	No [h]
300-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1.6	--[b]	1.0	--	0	5.00E-02	--	Scaled GWP SSL	--
300-109_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,108	101,630[f]	1.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-109_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	1.0	--	1	---	--	Scaled GWP SSL	--
300-109_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	--[d]	1.0	--	1	1.00E+00	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	37	--[b]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	19	--[b]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	2.1	--[b]	1.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.3	--[b]	1.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.3	--[b]	1.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	5.1	--[b]	1.0	--	0	5.00E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	29	--[b]	1.0	--	0	3.00E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Pyrene	129-00-0	µg/kg	7.0	--[b]	1.0	--	0	5.00E-02	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,450	--[b]	1.0	--	0	1.00E+01	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,877	101,630[f]	1.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-109_Staging Pile Area_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	2.5	--[d]	1.0	--	1	---	--	Scaled GWP SSL	--
300-109_Staging Pile Area_Focused	Rad	Uranium-238	U-238	pCi/g	2.3	--[d]	1.0	--	1	1.00E+00	--	Scaled GWP SSL	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	120,000	2.00E+06[e]	1.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	230,000	2.00E+06[e]	1.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
300-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	52,000	2.00E+06[e]	5.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	322	270,034	58.3	4,632	130	6.00E-01	4,632	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,876	101,630[f]	58.3	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-259_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	479,584	--[b]	58.3	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [h]
300-259_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.6	--[d]	58.3	--	1	---	--	Scaled GWP SSL	--
300-259_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	--[d]	58.3	--	1	1.00E+00	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	922	270,034	33.0	8,183	130	6.00E-01	8,183	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,360	1.08E+08	33.0	3,267,927	3,890	2.00E+00	3,267,927	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	73,300	2.41E+08	33.0	7,318,148	22,000	1.00E+00	7,318,148	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	18,300	1.06E+07	33.0	320,120	10,200	5.00E-01	320,120	Scaled GWP SSL	No [h]

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot 10\ m \cdot \frac{pCi}{g}\ m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
300-260_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	537	2.58E+07	33.0	782,639	470	2.00E+00	782,639	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	206	--[b]	33.0	--	167	2.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,800	101,630[f]	33.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-260_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	77,400	--[b]	33.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [h]
300-260_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.25	--[d]	33.0	--	0	5.00E-01	--	Scaled GWP SSL	--
300-260_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	4.3	--[d]	33.0	--	1	1.00E+00	--	Scaled GWP SSL	--
300-272_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	43,100	2.00E+06[e]	1.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	960	3.69E+07	43.0	857,712	0	1.00E-01	857,712	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	260	270,034	43.0	6,280	130	6.00E-01	6,280	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.3	--[b]	43.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.9	--[b]	43.0	--	0	1.50E-02	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	2.2	--[b]	43.0	--	0	1.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	42,923	2.41E+08	43.0	5,616,253	22,000	1.00E+00	5,616,253	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	2,300	--[b]	43.0	--	0	5.00E-02	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	81	3.08E+07	43.0	717,171	0	3.00E-02	717,171	Scaled GWP SSL	No
300-275_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	17	1.41E+06	43.0	32,756	13	2.50E+00	32,756	Scaled GWP SSL	No [h]
300-275_Shallow_1	non-Rad	Strontium	7440-24-6	µg/kg	20,196	--[b]	43.0	--	0	1.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,483	--[b]	43.0	--	0	1.00E+01	--	Scaled GWP SSL	--
300-275_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,251	101,630[f]	43.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-275_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	7.7	--[d]	43.0	--	1	---	--	Scaled GWP SSL	--
300-275_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.0	--[d]	43.0	--	0	5.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_1	Rad	Uranium-238	U-238	pCi/g	7.4	--[d]	43.0	--	1	1.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	3.6	3.69E+07	7.9	4,668,561	0	1.00E-01	4,668,561	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	56	--[b]	7.9	--	0	5.00E-02	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	2.6	3.08E+07	7.9	3,903,591	0	3.00E-02	3,903,591	Scaled GWP SSL	No
300-275_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	28	1.41E+06	7.9	178,294	13	2.50E+00	178,294	Scaled GWP SSL	No [h]
300-275_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	27,081	--[b]	7.9	--	0	1.00E+00	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,149	--[b]	7.9	--	0	1.00E+01	--	Scaled GWP SSL	--
300-275_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,725	101,630[f]	7.9	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-275_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[d]	7.9	--	1	---	--	Scaled GWP SSL	--
300-275_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	7.9	--	0	5.00E-01	--	Scaled GWP SSL	--
300-275_Shallow_2	Rad	Uranium-238	U-238	pCi/g	1.2	--[d]	7.9	--	1	1.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1016	12674-11-2	µg/kg	10	--[b]	117.4	--	0	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	16	97,738	117.4	833	0	1.65E-02	833	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	190	91,112	117.4	776	0	1.65E-02	776	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	84	--[b]	117.4	--	0	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	--[b]	117.4	--	0	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	228	8.41E+06	117.4	71,630	0	3.30E-01	71,630	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	16	1.41E+06	117.4	11,998	13	2.50E+00	11,998	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	2.9	2,098	117.4	18	0	5.00E-03	18	Scaled GWP SSL	No [j]
300-33, 300-41, 300-256_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	486	2.58E+07	117.4	219,992	470	2.00E+00	219,992	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Silver	7440-22-4	µg/kg	782	--[b]	117.4	--	167	2.00E-01	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,349	101,630[f]	117.4	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.1	--[d]	117.4	--	1	---	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.34	--[d]	117.4	--	0	5.00E-01	--	Scaled GWP SSL	--

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pCi}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
300-33, 300-41, 300-256_Shallow	Rad	Uranium-238	U-238	pCi/g	2.1	–[d]	117.4	--	1	1.00E+00	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	330	91,112	68.5	1,330	0	1.65E-02	1,330	Scaled GWP SSL	No [h]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	385	–[b]	68.5	--	0	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	–[b]	68.5	--	0	1.65E-02	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2	2,098	68.5	31	0	5.00E-03	31	Scaled GWP SSL	No [i]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,460	101,630[f]	68.5	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	3.0	–[d]	68.5	--	1	---	--	Scaled GWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	2.2	–[d]	68.5	--	1	1.00E+00	--	Scaled GWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	100	–[b]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,200	–[b]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-44_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	4,100	270,034	1.0	270,034	130	6.00E-01	270,034	Scaled GWP SSL	No
300-44_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	16,900	20,000[g]	1.0	20,000	6,470	1.00E+00	20,000	Scaled GWP SSL	No
300-45_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	86	–[b]	5.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-45_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	290	–[b]	5.0	--	0	3.30E-01	--	Scaled GWP SSL	--
300-45_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,600	101,630[f]	5.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-45_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	–[d]	5.0	--	1	1.00E+00	--	Scaled GWP SSL	--
300-49_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	176	270,034	75.0	3,600	130	6.00E-01	3,600	Scaled GWP SSL	No
300-49_Shallow	non-Rad	Silver	7440-22-4	µg/kg	621	–[b]	75.0	--	167	2.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	–[d]	75.0	--	1	---	--	Scaled GWP SSL	--
300-49_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	–[d]	75.0	--	0	5.00E-01	--	Scaled GWP SSL	--
300-49_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	–[d]	75.0	--	1	1.00E+00	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	3,000	270,034	50.0	5,401	130	6.00E-01	5,401	Scaled GWP SSL	No
300-50_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	126	–[b]	50.0	--	0	1.65E-02	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	19	–[b]	50.0	--	0	3.30E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Silver	7440-22-4	µg/kg	2,992	–[b]	50.0	--	167	2.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,938	101,630[f]	50.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
300-50_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	7.9	–[d]	50.0	--	1	---	--	Scaled GWP SSL	--
300-50_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.66	–[d]	50.0	--	0	5.00E-01	--	Scaled GWP SSL	--
300-50_Shallow	Rad	Uranium-238	U-238	pCi/g	8.4	–[d]	50.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_1	non-Rad	Aroclor-1248	12672-29-6	µg/kg	3,000	91,112	60.0	1,519	0	1.65E-02	1,519	Scaled GWP SSL	Yes [h]
316-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	19,014	20,000[g]	60.0	20,000	6,470	1.00E+00	20,000	Scaled GWP SSL	No
316-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	69	–[b]	60.0	--	0	3.30E-01	--	Scaled GWP SSL	--
316-1_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	98	8.41E+06	60.0	140,156	0	3.30E-01	140,156	Scaled GWP SSL	No
316-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	83,027	101,630[f]	60.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
316-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.2	–[d]	60.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	28	–[d]	60.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	490	270,034	50.0	5,401	130	6.00E-01	5,401	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	98	–[b]	50.0	--	0	1.65E-02	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	342	–[b]	50.0	--	0	3.30E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	50,455	–[b]	50.0	--	18,500	2.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	1.37E+06	2.41E+08	50.0	4,829,978	22,000	1.00E+00	4,829,978	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	3.2	–[b]	50.0	--	0	1.65E-03	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	14,409	1.06E+07	50.0	211,279	10,200	5.00E-01	211,279	Scaled GWP SSL	No [h]
316-1_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	1,105	1.41E+06	50.0	28,171	13	2.50E+00	28,171	Scaled GWP SSL	No [h]
316-1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	94,656	–[b]	50.0	--	19,100	4.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Phenol	108-95-2	µg/kg	28	1.49E+06	50.0	29,827	0	3.30E-01	29,827	Scaled GWP SSL	No

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lagoonal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
316-1_Shallow_3	non-Rad	Selenium	7782-49-2	µg/kg	1,444	3.02E+06	50.0	60,491	780	1.00E+00	60,491	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Silver	7440-22-4	µg/kg	13,196	–[b]	50.0	--	167	2.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	63,074	101,630[c]	50.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
316-1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	82,016	–[b]	50.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [h]
316-1_Shallow_3	Rad	Cobalt-60	10198-40-0	pCi/g	2.3	–[b]	50.0	--	0	5.00E-03	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	23	–[d]	50.0	--	1	---	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	2.6	–[d]	50.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_3	Rad	Uranium-238	U-238	pCi/g	21	–[d]	50.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	µg/kg	62	–[b]	30.0	--	0	1.65E-02	--	Scaled GWP SSL	--
316-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	42,963	101,630[c]	30.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
316-1_Shallow_4	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	–[b]	30.0	--	0	5.00E-03	--	Scaled GWP SSL	--
316-1_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	16	–[d]	30.0	--	1	---	--	Scaled GWP SSL	--
316-1_Shallow_4	Rad	Uranium-235	15117-96-1	pCi/g	1.1	–[d]	30.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-1_Shallow_4	Rad	Uranium-238	U-238	pCi/g	14	–[d]	30.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	210,452	101,630[c]	71.0	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
316-2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.092	–[b]	71.0	--	0	5.00E-03	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	86	–[d]	71.0	--	1	---	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	12	–[d]	71.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	69	–[d]	71.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	µg/kg	697	91,112	117.0	779	0	1.65E-02	779	Scaled GWP SSL	No [h]
316-2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	42	–[b]	117.0	--	0	1.65E-02	--	Scaled GWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	110	–[b]	117.0	--	0	1.65E-02	--	Scaled GWP SSL	--
316-2_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	291,369	101,630[c]	117.0	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
316-2_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.45	–[b]	117.0	--	0	5.00E-03	--	Scaled GWP SSL	--
316-2_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	115	–[d]	117.0	--	1	---	--	Scaled GWP SSL	--
316-2_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	11	–[d]	117.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_2	Rad	Uranium-238	U-238	pCi/g	96	–[d]	117.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-2_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	8,000	20,000[f]	167.5	20,000	6,470	1.00E+00	20,000	Scaled GWP SSL	No
316-2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	260	–[b]	167.5	--	0	3.30E-01	--	Scaled GWP SSL	--
316-2_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	180	8.41E+06	167.5	50,205	0	3.30E-01	50,205	Scaled GWP SSL	No
316-2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	73,174	101,630[c]	167.5	101,630	3,210	---	101,630	Scaled GWP SSL	No
316-2_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.91	–[d]	167.5	--	0	5.00E-01	--	Scaled GWP SSL	--
316-2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	24	–[d]	167.5	--	1	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	38	–[b]	68.0	--	0	1.50E-02	--	Scaled GWP SSL	--
316-5_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	146	–[b]	68.0	--	0	3.30E-01	--	Scaled GWP SSL	--
316-5_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	100	8.41E+06	68.0	123,667	0	3.30E-01	123,667	Scaled GWP SSL	No
316-5_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	271,835	101,630[c]	68.0	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
316-5_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.48	–[b]	68.0	--	0	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	2.3	–[b]	68.0	--	1	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	19	–[d]	68.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_1	Rad	Uranium-238	U-238	pCi/g	89	–[d]	68.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	140	270	68.0	4	0	5.00E-03	4	Scaled GWP SSL	Yes [i]
316-5_Shallow_2	non-Rad	2-Butoxyethanol	111-76-2	µg/kg	240	251,308	68.0	3,696	0	3.30E-01	3,696	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	180	–[b]	68.0	--	0	3.30E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	110	8.41E+06	68.0	123,667	0	3.30E-01	123,667	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	38	–[b]	68.0	--	0	1.00E-01	--	Scaled GWP SSL	--

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Laguna and 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
316-5_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	146	2.85E+07	68.0	419,168	0	3.30E-01	419,168	Scaled GWP SSL	No
316-5_Shallow_2	non-Rad	Silver	7440-22-4	µg/kg	3,600	--[h]	68.0	--	167	2.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	204,701	101,630[i]	68.0	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [m]
316-5_Shallow_2	Rad	Americium-241	14596-10-2	pCi/g	0.12	--[h]	68.0	--	0	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	1.7	--[h]	68.0	--	1	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[h]	68.0	--	0	5.00E-03	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	9.0	--[d]	68.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_2	Rad	Uranium-238	U-238	pCi/g	68	--[d]	68.0	--	1	1.00E+00	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	57	91,112	68.0	1,340	0	1.65E-02	1,340	Scaled GWP SSL	No [k]
316-5_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	70	--[h]	68.0	--	0	1.65E-02	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[h]	68.0	--	0	1.65E-02	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	190	--[h]	68.0	--	0	3.30E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	1,500	2.85E+07	68.0	419,168	0	3.30E-01	419,168	Scaled GWP SSL	No
316-5_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	138,095	101,630[i]	68.0	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [m]
316-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	--[h]	68.0	--	1	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.072	--[h]	68.0	--	0	1.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	7.7	--[d]	68.0	--	0	5.00E-01	--	Scaled GWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	45	--[d]	68.0	--	1	1.00E+00	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	25	--[h]	1.0	--	0	3.30E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	590	2.23E+06	1.0	2,227,917	0	2.00E-02	2,227,917	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	0.56	7,793	1.0	7,793	0	1.65E-03	7,793	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	0.39	285	1.0	285	0	1.65E-03	285	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	360	270,034	1.0	270,034	130	6.00E-01	270,034	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	850	--[h]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	910	--[h]	1.0	--	0	3.30E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	340	8.41E+06	1.0	8,409,355	0	3.30E-01	8,409,355	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	13	2,733	1.0	2,733	0	3.30E-03	2,733	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	98	2.85E+07	1.0	28,503,404	0	3.30E-01	28,503,404	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	1.9	2.46E+06	1.0	2,455,973	0	1.65E-03	2,455,973	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Endosulfan II	33213-65-9	µg/kg	3.1	2.46E+06	1.0	2,455,973	0	3.30E-03	2,455,973	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	110	1.41E+06	1.0	1,408,526	13	2.50E+00	1,408,526	Scaled GWP SSL	No [k]
331 LSLDF_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	3.3	--[h]	1.0	--	0	1.65E-02	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	11	2,098	1.0	2,098	0	5.00E-03	2,098	Scaled GWP SSL	No [l]
331 LSLDF_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	590	2.58E+07	1.0	25,827,075	470	2.00E+00	25,827,075	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	9,500	3.03E+06	1.0	3,025,997	0	---	3,025,997	Scaled GWP SSL	No
331 LSLDF_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,100	--[h]	1.0	--	167	2.00E-01	--	Scaled GWP SSL	--
331 LSLDF_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	--[h]	1.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [k]
600-243_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	279	1.07E+06	40.3	26,584	0	3.30E-01	26,584	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	31	--[h]	40.3	--	0	5.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,300	270,034	40.3	6,701	130	6.00E-01	6,701	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	27	--[h]	40.3	--	0	1.65E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	18	--[h]	40.3	--	0	1.65E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Barium	7440-39-3	µg/kg	292,072	--[h]	40.3	--	132,000	5.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	43	--[h]	40.3	--	0	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	43	--[h]	40.3	--	0	1.50E-02	--	Scaled GWP SSL	--

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pg}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
600-243_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	46	--[b]	40.3	--	0	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32	--[b]	40.3	--	0	1.50E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	2,079	--[b]	40.3	--	1,510	2.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	432	--[b]	40.3	--	0	3.30E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Boron	7440-42-8	µg/kg	294,463	1.08E+08	40.3	2,675,970	3,890	2.00E+00	2,675,970	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	793	3.52E+06	40.3	87,378	563	2.00E-01	87,378	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	63	--[b]	40.3	--	0	1.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Copper	7440-50-8	µg/kg	53,981	2.41E+08	40.3	5,992,528	22,000	1.00E+00	5,992,528	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	78	1.16E+06	40.3	28,743	0	3.30E-01	28,743	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	37	2.85E+07	40.3	707,281	0	3.30E-01	707,281	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	79	--[b]	40.3	--	0	5.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	28	--[b]	40.3	--	0	3.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Lead	7439-92-1	µg/kg	40,139	1.06E+07	40.3	262,133	10,200	5.00E-01	262,133	Scaled GWP SSL	No [h]
600-243_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,869	2.58E+07	40.3	640,870	470	2.00E+00	640,870	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	204	2.26E+06	40.3	56,037	0	2.00E+00	56,037	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	21,395	--[b]	40.3	--	19,100	4.00E+00	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	70	--[b]	40.3	--	0	5.00E-02	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	5,709	3.02E+06	40.3	75,051	780	1.00E+00	75,051	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Silver	7440-22-4	µg/kg	500	--[b]	40.3	--	167	2.00E-01	--	Scaled GWP SSL	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	95,319	2.00E+06[e]	40.3	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	334,524	2.00E+06[e]	40.3	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
600-243_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	84,099	--[b]	40.3	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [h]
600-47_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,303	101,630[f]	22.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
600-47_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	22.0	--	1	---	--	Scaled GWP SSL	--
600-47_Shallow	Rad	Uranium-238	U-238	pCi/g	1.6	--[d]	22.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,760	--[b]	32.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Aroclor-1260	11096-82-5	µg/kg	294	--[b]	32.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Barium	7440-39-3	µg/kg	299,000	--[b]	32.0	--	132,000	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep	non-Rad	Copper	7440-50-8	µg/kg	46,300	2.41E+08	32.0	7,546,840	22,000	1.00E+00	7,546,840	Scaled GWP SSL	No
618-1_Deep	non-Rad	Lead	7439-92-1	µg/kg	58,400	1.06E+07	32.0	330,123	10,200	5.00E-01	330,123	Scaled GWP SSL	No [h]
618-1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	1,180	1.41E+06	32.0	44,016	13	2.50E+00	44,016	Scaled GWP SSL	No [h]
618-1_Deep	non-Rad	Molybdenum	7439-98-7	µg/kg	493	2.58E+07	32.0	807,096	470	2.00E+00	807,096	Scaled GWP SSL	No
618-1_Deep	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	220	3.03E+06	32.0	94,562	0	---	94,562	Scaled GWP SSL	No
618-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	89,439	101,630[f]	32.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-1_Deep	non-Rad	Zinc	7440-66-6	µg/kg	134,000	--[b]	32.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [h]
618-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	33	--[d]	32.0	--	1	---	--	Scaled GWP SSL	--
618-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	2.7	--[d]	32.0	--	0	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep	Rad	Uranium-238	U-238	pCi/g	32	--[d]	32.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	407	270,034	25.0	10,801	130	6.00E-01	10,801	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1.24E+06	--[b]	25.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	99	--[b]	25.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	1.87E+06	--[b]	25.0	--	132,000	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,620	1.08E+08	25.0	4,313,663	3,890	2.00E+00	4,313,663	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,030	3.52E+06	25.0	140,853	563	2.00E-01	140,853	Scaled GWP SSL	No

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{mg}{kg}\text{-m to }\frac{pCi}{g}\text{-m}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
618-1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,900	–[b]	25.0	--	18,500	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	68,700	2.41E+08	25.0	9,659,956	22,000	1.00E+00	9,659,956	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	3,300	–[b]	25.0	--	2,810	5.00E+00	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	333,000	1.06E+07	25.0	422,558	10,200	5.00E-01	422,558	Scaled GWP SSL	No [b]
618-1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8,940	1.41E+06	25.0	56,341	13	2.50E+00	56,341	Scaled GWP SSL	No [b]
618-1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,140	2.58E+07	25.0	1,033,083	470	2.00E+00	1,033,083	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	1,560	3.03E+06	25.0	121,040	0	---	121,040	Scaled GWP SSL	No
618-1_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,290	–[b]	25.0	--	167	2.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	196,154	101,630[f]	25.0	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
618-1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	82,000	–[b]	25.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [b]
618-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	6.5	–[b]	25.0	--	1	1.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	70	–[d]	25.0	--	1	---	--	Scaled GWP SSL	--
618-1_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.5	–[d]	25.0	--	0	5.00E-01	--	Scaled GWP SSL	--
618-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	65	–[d]	25.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	264	–[b]	40.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	54	–[b]	40.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	31	1.41E+06	40.0	35,213	13	2.50E+00	35,213	Scaled GWP SSL	No [b]
618-1_Shallow	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	300	3.03E+06	40.0	75,650	0	---	75,650	Scaled GWP SSL	No
618-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,224	101,630[f]	40.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	–[d]	40.0	--	1	---	--	Scaled GWP SSL	--
618-1_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	–[d]	40.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.22E+07	–[b]	40.0	--	11,800,000	5.00E+00	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	455	270,034	40.0	6,751	130	6.00E-01	6,751	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	35	91,112	40.0	2,278	0	1.65E-02	2,278	Scaled GWP SSL	No [b]
618-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	981	–[b]	40.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	56	–[b]	40.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,500	–[b]	40.0	--	18,500	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,800	2.41E+08	40.0	6,037,472	22,000	1.00E+00	6,037,472	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	198	1.41E+06	40.0	35,213	13	2.50E+00	35,213	Scaled GWP SSL	No [b]
618-1_Shallow_Focused	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	260	3.03E+06	40.0	75,650	0	---	75,650	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,120	–[b]	40.0	--	167	2.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	24,957	101,630[f]	40.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	68,100	–[b]	40.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [b]
618-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	–[d]	40.0	--	1	---	--	Scaled GWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.99	–[d]	40.0	--	0	5.00E-01	--	Scaled GWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	8.2	–[d]	40.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-12_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	8,557	20,000[g]	130.0	20,000	6,470	1.00E+00	20,000	Scaled GWP SSL	No
618-12_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	63	–[b]	130.0	--	0	3.30E-01	--	Scaled GWP SSL	--
618-12_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	60	8.41E+06	130.0	64,687	0	3.30E-01	64,687	Scaled GWP SSL	No
618-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	32,092	101,630[f]	130.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.47	–[d]	130.0	--	0	5.00E-01	--	Scaled GWP SSL	--
618-12_Shallow	Rad	Uranium-238	U-238	pCi/g	11	–[d]	130.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-13_Shallow	non-Rad	Acetone	67-64-1	µg/kg	8.6	2.23E+06	40.0	55,698	0	2.00E-02	55,698	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	312	270,034	40.0	6,751	130	6.00E-01	6,751	Scaled GWP SSL	No
618-13_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	5.1	2,098	40.0	52	0	5.00E-03	52	Scaled GWP SSL	No [i]
618-13_Shallow	non-Rad	Tin	7440-31-5	µg/kg	1,050	–[b]	40.0	--	0	1.00E+01	--	Scaled GWP SSL	--

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC> Soil Screening Level Protective of Surface Water?
618-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,061	101,630[f]	40.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	_[d]	40.0	--	1	---	--	Scaled GWP SSL	--
618-13_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	_[d]	40.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-13_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	5.9	2.23E+06	40.0	55,698	0	2.00E-02	55,698	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	233	270,034	40.0	6,751	130	6.00E-01	6,751	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	150	6,000[f]	40.0	6,000	0	---	6,000	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	5.0	2,098	40.0	52	0	5.00E-03	52	Scaled GWP SSL	No
618-13_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	745	_[b]	40.0	--	0	1.00E+01	--	Scaled GWP SSL	--
618-13_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	_[d]	40.0	--	1	---	--	Scaled GWP SSL	--
618-2_Deep	non-Rad	Tin	7440-31-5	µg/kg	2,900	_[b]	47.7	--	0	1.00E+01	--	Scaled GWP SSL	--
618-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	491,176	101,630[f]	47.7	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
618-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	7.9	_[b]	47.7	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	1.5	_[b]	47.7	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	91	_[b]	47.7	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep	Rad	Plutonium-241	14119-32-5	pCi/g	42	_[b]	47.7	--	0	---	--	Scaled GWP SSL	--
618-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	12	227,428	47.7	4,771	0	5.00E-03	4,771	Scaled GWP SSL	No
618-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	161	_[d]	47.7	--	1	---	--	Scaled GWP SSL	--
618-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.78	_[d]	47.7	--	0	5.00E-01	--	Scaled GWP SSL	--
618-2_Deep	Rad	Uranium-238	U-238	pCi/g	165	_[d]	47.7	--	1	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	6.9	_[b]	47.7	--	0	1.65E-02	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	27	_[b]	47.7	--	0	3.30E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	18	2.85E+07	47.7	597,974	0	3.30E-01	597,974	Scaled GWP SSL	No
618-2_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,200	3.02E+06	47.7	63,452	780	1.00E+00	63,452	Scaled GWP SSL	No
618-2_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	600	_[b]	47.7	--	167	2.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Tin	7440-31-5	µg/kg	42,500	_[b]	47.7	--	0	1.00E+01	--	Scaled GWP SSL	--
618-2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	150,159	101,630[f]	47.7	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
618-2_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	9.2	_[b]	47.7	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.1	_[b]	47.7	--	1	1.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	1.6	_[b]	47.7	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	92	_[b]	47.7	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-241	14119-32-5	pCi/g	33	_[b]	47.7	--	0	---	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	227,428	47.7	4,771	0	5.00E-03	4,771	Scaled GWP SSL	No
618-2_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	48	_[d]	47.7	--	1	---	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	2.4	_[d]	47.7	--	0	5.00E-01	--	Scaled GWP SSL	--
618-2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	50	_[d]	47.7	--	1	1.00E+00	--	Scaled GWP SSL	--
618-2_Shallow	non-Rad	Tin	7440-31-5	µg/kg	2,400	_[b]	60.2	--	0	1.00E+01	--	Scaled GWP SSL	--
618-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,852	101,630[f]	60.2	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-2_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.81	_[b]	60.2	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.2	_[b]	60.2	--	1	1.00E-01	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	7.7	_[b]	60.2	--	0	1.00E+00	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.2	_[d]	60.2	--	1	---	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.21	_[d]	60.2	--	0	5.00E-01	--	Scaled GWP SSL	--
618-2_Shallow	Rad	Uranium-238	U-238	pCi/g	2.2	_[d]	60.2	--	1	1.00E+00	--	Scaled GWP SSL	--
618-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	238,577	101,630[f]	52.3	101,630	3,210	---	101,630	Scaled GWP SSL	Yes [e]
618-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	80	_[d]	52.3	--	1	---	--	Scaled GWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.8	_[d]	52.3	--	0	5.00E-01	--	Scaled GWP SSL	--

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left\{\frac{\mu g}{kg}\cdot m\ or\ \frac{pCi}{g}\cdot m\right\}$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL < Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
618-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	79	--[d]	52.3	--	1	1.00E+00	--	Scaled GWP SSL	--
618-4_Deep	non-Rad	Lead	7439-92-1	µg/kg	20,000	1.06E+07	47.3	223,182	10,200	5.00E-01	223,182	Scaled GWP SSL	No [h]
618-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	64,506	101,630[c]	47.3	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	20	--[d]	47.3	--	1	---	--	Scaled GWP SSL	--
618-4_Deep	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[d]	47.3	--	0	5.00E-01	--	Scaled GWP SSL	--
618-4_Deep	Rad	Uranium-238	U-238	pCi/g	22	--[d]	47.3	--	1	1.00E+00	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	2-Butanone	78-93-3	µg/kg	130	1.67E+06	47.3	35,321	0	3.30E-01	35,321	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Acetone	67-64-1	µg/kg	16	2.23E+06	47.3	47,069	0	2.00E-02	47,069	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,600	--[b]	47.3	--	0	1.65E-02	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	4,700	--[b]	47.3	--	0	3.30E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,500	3.52E+06	47.3	74,394	563	2.00E-01	74,394	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	27,700	--[b]	47.3	--	18,500	2.00E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	non-Rad	Diethyl ether	60-29-7	µg/kg	1.0	664,052	47.3	14,029	0	3.30E-03	14,029	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,900	1.06E+07	47.3	223,182	10,200	5.00E-01	223,182	Scaled GWP SSL	No [h]
618-4_Deep_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	40	2,098	47.3	44	0	5.00E-03	44	Scaled GWP SSL	No [i]
618-4_Deep_Focused	non-Rad	Phenol	108-95-2	µg/kg	110	1.49E+06	47.3	31,508	0	3.30E-01	31,508	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	24	16,996	47.3	359	0	5.00E-03	359	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Toluene	108-88-3	µg/kg	4.8	1.15E+06	47.3	24,400	0	5.00E-03	24,400	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,000	2.00E+06[f]	47.3	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	µg/kg	42,000	2.00E+06[f]	47.3	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	65	2.00E+06[f]	47.3	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	20,777	101,630[c]	47.3	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	1,334	47.3	28	0	5.00E-03	28	Scaled GWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloromonofluoromethane	75-69-4	µg/kg	12	1.95E+06	47.3	41,142	0	---	41,142	Scaled GWP SSL	No
618-4_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	7.2	--[d]	47.3	--	1	---	--	Scaled GWP SSL	--
618-4_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.51	--[d]	47.3	--	0	5.00E-01	--	Scaled GWP SSL	--
618-4_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	6.9	--[d]	47.3	--	1	1.00E+00	--	Scaled GWP SSL	--
618-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	49,000	1.06E+07	30.0	352,132	10,200	5.00E-01	352,132	Scaled GWP SSL	No [h]
618-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	7,456	101,630[c]	30.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	3.2	--[d]	30.0	--	1	---	--	Scaled GWP SSL	--
618-4_Shallow	Rad	Uranium-238	U-238	pCi/g	3.1	--[d]	30.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	82,300	1.06E+07	34.2	308,887	10,200	5.00E-01	308,887	Scaled GWP SSL	No [h]
618-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	26,618	101,630[c]	34.2	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	8.6	--[d]	34.2	--	1	---	--	Scaled GWP SSL	--
618-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.46	--[d]	34.2	--	0	5.00E-01	--	Scaled GWP SSL	--
618-5_Deep	Rad	Uranium-238	U-238	pCi/g	8.9	--[d]	34.2	--	1	1.00E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,800	270,034	14.1	19,151	130	6.00E-01	19,151	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	579,000	--[b]	14.1	--	512,000	2.50E+00	--	Scaled GWP SSL	--
618-5_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	33	1.41E+06	14.1	99,895	13	2.50E+00	99,895	Scaled GWP SSL	No [h]
618-5_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,270	3.02E+06	14.1	214,508	780	1.00E+00	214,508	Scaled GWP SSL	No
618-5_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	36,540	101,630[c]	14.1	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-5_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	14.1	--	1	---	--	Scaled GWP SSL	--
618-5_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.48	--[d]	14.1	--	0	5.00E-01	--	Scaled GWP SSL	--

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{pE}{kg} \cdot 10 \text{ of } \frac{pCi}{g} \cdot 1b\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
618-5_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	12	--[d]	14.1	--	1	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	560	270,034	92.0	2,935	130	6.00E-01	2,935	Scaled GWP SSL	No
618-7_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	14,567	1.06E+07	92.0	114,826	10,200	5.00E-01	114,826	Scaled GWP SSL	No [h]
618-7_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	44	1.41E+06	92.0	15,310	13	2.50E+00	15,310	Scaled GWP SSL	No [h]
618-7_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	20,977	--[b]	92.0	--	19,100	4.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,547	--[b]	92.0	--	0	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	10,814	101,630[f]	92.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-7_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	3.6	--[d]	92.0	--	1	---	--	Scaled GWP SSL	[g] --
618-7_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.36	--[d]	92.0	--	0	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_1	Rad	Uranium-238	U-238	pCi/g	3.6	--[d]	92.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-7_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	660	270,034	11.0	24,549	130	6.00E-01	24,549	Scaled GWP SSL	No
618-7_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	20	1.41E+06	11.0	128,048	13	2.50E+00	128,048	Scaled GWP SSL	No [h]
618-7_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,500	--[b]	11.0	--	0	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	450	270,034	21.0	12,859	130	6.00E-01	12,859	Scaled GWP SSL	No
618-7_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	20	1.41E+06	21.0	67,073	13	2.50E+00	67,073	Scaled GWP SSL	No [h]
618-7_Shallow_3	non-Rad	Tin	7440-31-5	µg/kg	1,800	--[b]	21.0	--	0	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_4	non-Rad	Antimony	7440-36-0	µg/kg	250	270,034	48.0	5,626	130	6.00E-01	5,626	Scaled GWP SSL	No
618-7_Shallow_4	non-Rad	Tin	7440-31-5	µg/kg	710	--[b]	48.0	--	0	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	150	3.69E+07	240.0	153,673	0	1.00E-01	153,673	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	980	270,034	240.0	1,125	130	6.00E-01	1,125	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	6.7	91,112	240.0	380	0	1.65E-02	380	Scaled GWP SSL	No [h]
618-7_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	88	--[b]	240.0	--	0	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	66	--[b]	240.0	--	0	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	52	--[b]	240.0	--	0	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	11	--[b]	240.0	--	0	1.50E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	470	--[b]	240.0	--	0	3.30E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	6,200	3.52E+06	240.0	14,672	563	2.00E-01	14,672	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	65,900	--[b]	240.0	--	18,500	2.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	69	--[b]	240.0	--	0	1.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	25,000	2.41E+08	240.0	1,006,245	22,000	1.00E+00	1,006,245	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	45	--[b]	240.0	--	0	3.00E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	33	2.85E+07	240.0	118,764	0	3.30E-01	118,764	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	48	--[b]	240.0	--	0	5.00E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	1.41E+06	240.0	5,869	13	2.50E+00	5,869	Scaled GWP SSL	No [h]
618-7_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	410	--[b]	240.0	--	0	5.00E-02	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,200	--[b]	240.0	--	0	1.00E+01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	680,000	2.00E+06[e]	240.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
618-7_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	19,563	101,630[f]	240.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-7_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	240.0	--	1	---	--	Scaled GWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.97	--[d]	240.0	--	0	5.00E-01	--	Scaled GWP SSL	--
618-7_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	6.4	--[d]	240.0	--	1	1.00E+00	--	Scaled GWP SSL	--
618-8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	846	3.02E+06	28.8	105,202	780	1.00E+00	105,202	Scaled GWP SSL	No
618-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.2	--[d]	28.8	--	1	---	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	110	270	7.0	39	0	5.00E-03	39	Scaled GWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	680	2.23E+06	7.0	318,274	0	2.00E-02	318,274	Scaled GWP SSL	No

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg}\cdot m \text{ or } \frac{pCi}{g}\cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Logpearson 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
618-9_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	390	7,793	7.0	1,113	0	1.65E-03	1,113	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	µg/kg	1,900	–[b]	7.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	µg/kg	1,900	2,903	7.0	415	0	1.65E-02	415	Scaled GWP SSL	Yes [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1232	11141-16-5	µg/kg	1,900	2,903	7.0	415	0	1.65E-02	415	Scaled GWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Aroclor-1242	53469-21-9	µg/kg	1,900	97,738	7.0	13,963	0	1.65E-02	13,963	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,900	91,112	7.0	13,016	0	1.65E-02	13,016	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,900	–[b]	7.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,900	–[b]	7.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	20,000[d]	7.0	20,000	6,470	1.00E+00	20,000	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	5,200	–[b]	7.0	--	0	3.30E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	2,700	8.41E+06	7.0	1,201,336	0	3.30E-01	1,201,336	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	69	–[b]	7.0	--	0	1.65E-02	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Chloroform	67-66-3	µg/kg	9.0	1,289	7.0	184	0	5.00E-03	184	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	7,200	2.85E+07	7.0	4,071,915	0	3.30E-01	4,071,915	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	44	–[b]	7.0	--	0	1.65E-03	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachlorobutadiene	87-68-3	µg/kg	760	–[b]	7.0	--	0	3.30E-01	--	Scaled GWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachloroethane	67-72-1	µg/kg	17,000	22,916	7.0	3,274	0	3.30E-01	3,274	Scaled GWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	330	1.41E+06	7.0	201,218	13	2.50E+00	201,218	Scaled GWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2,300	2,098	7.0	300	0	5.00E-03	300	Scaled GWP SSL	Yes [m]
618-9_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	1.67E+06	1.36E+07	7.0	1,945,284	52,000	2.50E+00	1,945,284	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	920	16,996	7.0	2,428	0	5.00E-03	2,428	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Toluene	108-88-3	µg/kg	9.0	1.15E+06	7.0	164,992	0	5.00E-03	164,992	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	8,963	101,630[f]	7.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
618-9_Shallow_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	1,334	7.0	191	0	5.00E-03	191	Scaled GWP SSL	No
618-9_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	3.0	–[e]	7.0	--	1	1.00E+00	--	Scaled GWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	42	97,738	49.0	1,995	0	1.65E-02	1,995	Scaled GWP SSL	No [h]
628-4_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,115	91,112	49.0	1,859	0	1.65E-02	1,859	Scaled GWP SSL	No [h]
628-4_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	243	–[b]	49.0	--	0	1.65E-02	--	Scaled GWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	38	–[b]	49.0	--	0	1.65E-02	--	Scaled GWP SSL	--
628-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	99,167	1.06E+07	49.0	215,591	10,200	5.00E-01	215,591	Scaled GWP SSL	No [h]
628-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	–[e]	49.0	--	1	---	--	Scaled GWP SSL	--
628-4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.11	–[e]	49.0	--	0	5.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	117	3.69E+07	8.0	4,610,204	0	1.00E-01	4,610,204	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	7.0	–[b]	8.0	--	0	5.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	359	270,034	8.0	33,754	130	6.00E-01	33,754	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,970	91,112	8.0	11,389	0	1.65E-02	11,389	Scaled GWP SSL	No [h]
UPR-300-17_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	450	–[b]	8.0	--	0	1.65E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	113	–[b]	8.0	--	0	1.65E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	59	–[b]	8.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	44	–[b]	8.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	33	–[b]	8.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	9.9	–[b]	8.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,903	1.08E+08	8.0	13,480,198	3,890	2.00E+00	13,480,198	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	39	–[b]	8.0	--	0	1.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	35	–[b]	8.0	--	0	5.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.9	3.08E+07	8.0	3,854,796	0	3.00E-02	3,854,796	Scaled GWP SSL	No

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (With Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot m \cdot \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?
UPR-300-17_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	5.9	--[b]	8.0	--	0	3.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,240	1.06E+07	8.0	1,320,493	10,200	5.00E-01	1,320,493	Scaled GWP SSL	No [b]
UPR-300-17_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	69	1.41E+06	8.0	176,066	13	2.50E+00	176,066	Scaled GWP SSL	No [b]
UPR-300-17_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	48	2.26E+06	8.0	282,286	0	2.00E+00	282,286	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	563,654	--[b]	8.0	--	19,100	4.00E+00	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	34	--[b]	8.0	--	0	5.00E-02	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Silver	7440-22-4	µg/kg	340	--[b]	8.0	--	167	2.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,950	2.00E+06[e]	8.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	210,420	2.00E+06[e]	8.0	2,000,000	0	---	2,000,000	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,420	101,630[c]	8.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
UPR-300-17_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	157,172	--[b]	8.0	--	67,800	1.00E+00	--	Scaled GWP SSL	-- [b]
UPR-300-17_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	6.1	--[d]	8.0	--	1	---	--	Scaled GWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[d]	8.0	--	0	5.00E-01	--	Scaled GWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-238	U-238	pCi/g	4.0	--[d]	8.0	--	1	1.00E+00	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	13	3.69E+07	21.0	1,756,268	0	1.00E-01	1,756,268	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	381	270,034	21.0	12,859	130	6.00E-01	12,859	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	879	91,112	21.0	4,339	0	1.65E-02	4,339	Scaled GWP SSL	No [b]
UPR-300-46_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	490	--[b]	21.0	--	0	1.65E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	84	--[b]	21.0	--	0	1.65E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.9	--[b]	21.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.4	--[b]	21.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.4	--[b]	21.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.8	--[b]	21.0	--	0	1.50E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	5.6	--[b]	21.0	--	0	1.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Dibenz[a,h]anthracene	53-70-3	µg/kg	1.3	--[b]	21.0	--	0	3.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	9.6	--[b]	21.0	--	0	5.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.2	3.08E+07	21.0	1,468,494	0	3.00E-02	1,468,494	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	7.6	--[b]	21.0	--	0	3.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	29	1.41E+06	21.0	67,073	13	2.50E+00	67,073	Scaled GWP SSL	No [b]
UPR-300-46_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	36	2.26E+06	21.0	107,537	0	2.00E+00	107,537	Scaled GWP SSL	No
UPR-300-46_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	4.4	--[b]	21.0	--	0	5.00E-02	--	Scaled GWP SSL	--
UPR-300-46_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,897	101,630[c]	21.0	101,630	3,210	---	101,630	Scaled GWP SSL	No
UPR-300-46_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.8	--[d]	21.0	--	1	---	--	Scaled GWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	21.0	--	0	5.00E-01	--	Scaled GWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	--[d]	21.0	--	1	1.00E+00	--	Scaled GWP SSL	--

Notes:

a. ECF-300FF5-11-0153, 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.

b. 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.

c. Due to the complex geochemistry of uranium in 300 Area source operable unit soils, uranium SSLs were derived using a site-specific two-dimensional model as described in ECF-300FF5-11-0151. These values are derived from a 2-D model, and therefore these values are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

d. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and then summing to provide a mass-based total uranium exposure point concentration (identified as Total_U_Isotopes), as described in ECF-300NPL-11-0137, Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit. These values are derived from a 2-D model, and therefore are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

e. 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.

Table 7-4. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Groundwater (Wkh Background Consideration)

								Selection of Soil Screening Level Protective of Groundwater					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Groundwater Protection[a] $\left(\frac{\mu g}{kg} \cdot \text{in.cz} \frac{pCi}{g} \cdot \text{in}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Lognormal 90th Percentile Background Value (zero denotes no background value) (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Groundwater (µg/kg or pCi/g)	Basis for SSL Protective of Groundwater	Is EPC > Soil Screening Level Protective of Surface Water?

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 Hanford Site cleanup value for arsenic is 20 mg/kg based on the letter Issues Associated with Establishing Soil Cleanup Levels for Arsenic published by the Department of Ecology Toxics Cleanup Program on June 11, 2013. This letter indicates that the Method A soil cleanup level of 20 mg/kg can be used to define natural background levels when developing Method B soil cleanup levels for the Hanford Site. While the measured 90th percentile background concentration of arsenic in Hanford soils is about 6.47 mg/kg, the value of 20 mg/kg is used as the applicable cleanup level. This value is not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

h. If current Kd values (ECF-Hanford-12-0023 Rev. 3) were applied to the analysis, these contaminants would have been assigned "NR" due to the Kd exceeding the Kd breakthrough threshold; If exceedence resulted from scaling for these analytes (aroclor-1242, aroclor-1248, lead, mercury, zinc) it was dismissed based on this consideration.

i. Exceeded GWP SSL, but eliminated through further evaluation; volatile mass limited.

j. Exceeded GWP SSL but eliminated through further consideration; laboratory contaminant.

k. Exceeded GWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1221 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

l. Exceeded GWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1232 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

m. Exceeded before dimensional reevaluation.

-- = Not applicable or no value

Exceedances of cleanup levels that are not eliminated under further consideration are highlighted in yellow.

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot \frac{m}{\frac{pCi}{g}}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Lognormal 95th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300 ASH PITS_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	52	133	50.0	3	0	1.65E-02	3	Scaled SWP SSL	Yes [h]
300 ASH PITS_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	96	–[h]	50.0	--	0	3.30E-01	--	Scaled SWP SSL	--
300 ASH PITS_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	76	1.50E+06	50.0	30,093	0	3.30E-01	30,093	Scaled SWP SSL	No
300-10_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	13,500	20,000[d]	38.6	20,000	6,470	1.00E+00	20,000	Scaled SWP SSL	No [m]
300-10_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	200	–[h]	38.6	--	0	3.30E-01	--	Scaled SWP SSL	--
300-10_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	230	1.50E+06	38.6	38,980	0	3.30E-01	38,980	Scaled SWP SSL	No
300-10_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,078	2.64E+06[f]	38.6	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-10_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	–[g]	38.6	--	1	1.00E+00	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	122	–[h]	1.0	--	0	1.65E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	40	–[h]	1.0	--	0	1.65E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.2	–[h]	1.0	--	0	1.50E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	2.3	–[h]	1.0	--	0	1.50E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	1.8	–[h]	1.0	--	0	1.00E-01	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	14	–[h]	1.0	--	0	3.00E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	22	8,451	1.0	8,451	13	2.50E+00	8,451	Scaled SWP SSL	No [h]
300-109_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	1.6	–[h]	1.0	--	0	5.00E-02	--	Scaled SWP SSL	--
300-109_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,108	2.64E+06[f]	1.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-109_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	–[g]	1.0	--	1	---	--	Scaled SWP SSL	--
300-109_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.4	–[g]	1.0	--	1	1.00E+00	--	Scaled SWP SSL	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	120,000	–[e]	1.0	--	0	---	--	Scaled SWP SSL	--
300-223_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	230,000	–[e]	1.0	--	0	---	--	Scaled SWP SSL	--
300-23_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	52,000	–[e]	5.0	--	0	---	--	Scaled SWP SSL	--
300-259_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	322	252,032	58.3	4,323	130	6.00E-01	4,323	Scaled SWP SSL	No
300-259_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,876	2.64E+06[f]	58.3	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-259_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	479,584	6.41E+07	58.3	1,100,048	67,800	1.00E+00	1,100,048	Scaled SWP SSL	No [h]
300-259_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.6	–[g]	58.3	--	1	---	--	Scaled SWP SSL	--
300-259_Shallow	Rad	Uranium-238	U-238	pCi/g	1.3	–[g]	58.3	--	1	1.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	922	252,032	33.0	7,637	130	6.00E-01	7,637	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Boron	7440-42-8	µg/kg	8,360	–[e]	33.0	--	3,890	2.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	73,300	3.40E+06	33.0	102,911	22,000	1.00E+00	102,911	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Lead	7439-92-1	µg/kg	18,300	1.48E+06	33.0	44,979	10,200	5.00E-01	44,979	Scaled SWP SSL	No [h]
300-260_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	537	–[h]	33.0	--	470	2.00E+00	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	206	–[h]	33.0	--	167	2.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,800	2.64E+06[f]	33.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-260_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	77,400	6.41E+07	33.0	1,943,418	67,800	1.00E+00	1,943,418	Scaled SWP SSL	No [h]
300-260_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.25	–[g]	33.0	--	0	5.00E-01	--	Scaled SWP SSL	--
300-260_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	4.3	–[g]	33.0	--	1	1.00E+00	--	Scaled SWP SSL	--
300-272_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	43,100	–[e]	1.0	--	0	---	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Acenaphthene	83-32-9	µg/kg	960	4.94E+07	43.0	1,148,605	0	1.00E-01	1,148,605	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	260	252,032	43.0	5,861	130	6.00E-01	5,861	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	1.3	–[h]	43.0	--	0	1.50E-02	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	1.9	–[h]	43.0	--	0	1.50E-02	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Chrysene	218-01-9	µg/kg	2.2	–[h]	43.0	--	0	1.00E-01	--	Scaled SWP SSL	--

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g/kg}{\mu g/L} \cdot \frac{(\mu g/L)/(\mu g/m^2/s)}{(\mu g/m^2/s)/(m)}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-275_Shallow_1	non-Rad	Copper	7440-50-8	µg/kg	42,923	3.40E+06	43.0	78,979	22,000	1.00E+00	78,979	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Fluoranthene	206-44-0	µg/kg	2,300	2.82E+08	43.0	6,552,014	0	5.00E-02	6,552,014	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Fluorene	86-73-7	µg/kg	81	1.06E+08	43.0	2,465,277	0	3.00E-02	2,465,277	Scaled SWP SSL	No
300-275_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	17	8,451	43.0	197	13	2.50E+00	197	Scaled SWP SSL	No [h]
300-275_Shallow_1	non-Rad	Strontium	7440-24-6	µg/kg	20,196	--[b]	43.0	--	0	1.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,483	--[b]	43.0	--	0	1.00E+01	--	Scaled SWP SSL	--
300-275_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,251	2.64E+06[c]	43.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-275_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	7.7	--[d]	43.0	--	1	---	--	Scaled SWP SSL	--
300-275_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.0	--[d]	43.0	--	0	5.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_1	Rad	Uranium-238	U-238	pCi/g	7.4	--[d]	43.0	--	1	1.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Acenaphthene	83-32-9	µg/kg	3.6	4.94E+07	7.9	6,251,899	0	1.00E-01	6,251,899	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Fluoranthene	206-44-0	µg/kg	56	2.82E+08	7.9	35,662,861	0	5.00E-02	35,662,861	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Fluorene	86-73-7	µg/kg	2.6	1.06E+08	7.9	13,418,595	0	3.00E-02	13,418,595	Scaled SWP SSL	No
300-275_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	28	8,451	7.9	1,070	13	2.50E+00	1,070	Scaled SWP SSL	No [h]
300-275_Shallow_2	non-Rad	Strontium	7440-24-6	µg/kg	27,081	--[b]	7.9	--	0	1.00E+00	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,149	--[b]	7.9	--	0	1.00E+01	--	Scaled SWP SSL	--
300-275_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,725	2.64E+06[c]	7.9	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-275_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[d]	7.9	--	1	---	--	Scaled SWP SSL	--
300-275_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	7.9	--	0	5.00E-01	--	Scaled SWP SSL	--
300-275_Shallow_2	Rad	Uranium-238	U-238	pCi/g	1.2	--[d]	7.9	--	1	1.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1016	12674-11-2	µg/kg	10	--[b]	117.4	--	0	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	16	143	117.4	1	0	1.65E-02	1	Scaled SWP SSL	Yes [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	190	133	117.4	1	0	1.65E-02	1	Scaled SWP SSL	Yes [hm]
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	84	--[b]	117.4	--	0	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	17	--[b]	117.4	--	0	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	228	1.50E+06	117.4	12,816	0	3.30E-01	12,816	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	16	8,451	117.4	72	13	2.50E+00	72	Scaled SWP SSL	No [h]
300-33, 300-41, 300-256_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	2.9	1,931	117.4	16	0	5.00E-03	16	Scaled SWP SSL	No [i]
300-33, 300-41, 300-256_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	486	--[b]	117.4	--	470	2.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Silver	7440-22-4	µg/kg	782	--[b]	117.4	--	167	2.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,349	2.64E+06[c]	117.4	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.1	--[d]	117.4	--	1	---	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.34	--[d]	117.4	--	0	5.00E-01	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow	Rad	Uranium-238	U-238	pCi/g	2.1	--[d]	117.4	--	1	1.00E+00	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	330	133	68.5	2	0	1.65E-02	2	Scaled SWP SSL	Yes [hm]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	385	--[b]	68.5	--	0	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[b]	68.5	--	0	1.65E-02	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2.2	1,931	68.5	28	0	5.00E-03	28	Scaled SWP SSL	No [i]
300-33, 300-41, 300-256_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	6,460	2.64E+06[c]	68.5	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	3.0	--[d]	68.5	--	1	---	--	Scaled SWP SSL	--
300-33, 300-41, 300-256_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	2.2	--[d]	68.5	--	1	1.00E+00	--	Scaled SWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	100	--[b]	1.0	--	0	1.65E-02	--	Scaled SWP SSL	--
300-37_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,200	--[b]	1.0	--	0	1.65E-02	--	Scaled SWP SSL	--
300-44_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	4,100	252,032	1.0	252,032	130	6.00E-01	252,032	Scaled SWP SSL	No
300-44_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	16,900	20,000[g]	1.0	20,000	6,470	1.00E+00	20,000	Scaled SWP SSL	No
300-45_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	86	--[b]	5.0	--	0	1.65E-02	--	Scaled SWP SSL	--

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[b]	Laguerreal 95th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
300-45_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	290	--[h]	5.0	--	0	3.30E-01	--	Scaled SWP SSL	--
300-45_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	3,600	2.64E+06[i]	5.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-45_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	1.2	--[g]	5.0	--	1	1.00E+00	--	Scaled SWP SSL	--
300-49_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	176	252,032	75.0	3,360	130	6.00E-01	3,360	Scaled SWP SSL	No
300-49_Shallow	non-Rad	Silver	7440-22-4	µg/kg	621	--[h]	75.0	--	167	2.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.3	--[g]	75.0	--	1	---	--	Scaled SWP SSL	--
300-49_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[g]	75.0	--	0	5.00E-01	--	Scaled SWP SSL	--
300-49_Shallow	Rad	Uranium-238	U-238	pCi/g	1.1	--[g]	75.0	--	1	1.00E+00	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	3,000	252,032	50.0	5,041	130	6.00E-01	5,041	Scaled SWP SSL	No
300-50_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	126	--[h]	50.0	--	0	1.65E-02	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	19	--[h]	50.0	--	0	3.30E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Silver	7440-22-4	µg/kg	2,992	--[h]	50.0	--	167	2.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	22,938	2.64E+06[i]	50.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
300-50_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	7.9	--[g]	50.0	--	1	---	--	Scaled SWP SSL	--
300-50_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.66	--[g]	50.0	--	0	5.00E-01	--	Scaled SWP SSL	--
300-50_Shallow	Rad	Uranium-238	U-238	pCi/g	8.4	--[g]	50.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_1	non-Rad	Aroclor-1248	12672-29-6	µg/kg	3,000	133	60.0	2	0	1.65E-02	2	Scaled SWP SSL	Yes [hm]
316-1_Shallow_1	non-Rad	Arsenic	7440-38-2	µg/kg	19,014	20,000[d]	60.0	20,000	6,470	1.00E+00	20,000	Scaled SWP SSL	No [m]
316-1_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	69	--[h]	60.0	--	0	3.30E-01	--	Scaled SWP SSL	--
316-1_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	98	1.50E+06	60.0	25,077	0	3.30E-01	25,077	Scaled SWP SSL	No
316-1_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	83,027	2.64E+06[i]	60.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-1_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	1.2	--[g]	60.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_1	Rad	Uranium-238	U-238	pCi/g	28	--[g]	60.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	490	252,032	50.0	5,041	130	6.00E-01	5,041	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Aroclor-1254	11097-69-1	µg/kg	98	--[h]	50.0	--	0	1.65E-02	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	342	--[h]	50.0	--	0	3.30E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Chromium	7440-47-3	µg/kg	50,455	--[h]	50.0	--	18,500	2.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Copper	7440-50-8	µg/kg	1.37E+06	3.40E+06	50.0	67,922	22,000	1.00E+00	67,922	Scaled SWP SSL	Yes
316-1_Shallow_3	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	3.2	--[h]	50.0	--	0	1.65E-03	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Lead	7439-92-1	µg/kg	14,409	1.48E+06	50.0	29,686	10,200	5.00E-01	29,686	Scaled SWP SSL	No [h]
316-1_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	1,105	8,451	50.0	169	13	2.50E+00	169	Scaled SWP SSL	Yes [h]
316-1_Shallow_3	non-Rad	Nickel	7440-02-0	µg/kg	94,656	--[h]	50.0	--	19,100	4.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Phenol	108-95-2	µg/kg	28	6.21E+06	50.0	124,281	0	3.30E-01	124,281	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Selenium	7782-49-2	µg/kg	1,444	302,457	50.0	6,049	780	1.00E+00	6,049	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Silver	7440-22-4	µg/kg	13,196	--[h]	50.0	--	167	2.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	63,074	2.64E+06[i]	50.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-1_Shallow_3	non-Rad	Zinc	7440-66-6	µg/kg	82,016	6.41E+07	50.0	1,282,656	67,800	1.00E+00	1,282,656	Scaled SWP SSL	No [h]
316-1_Shallow_3	Rad	Cobalt-60	10198-40-0	pCi/g	2.3	--[h]	50.0	--	0	5.00E-03	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Uranium-233/234	U-233/234	pCi/g	29	--[g]	50.0	--	1	---	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	2.6	--[g]	50.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-1_Shallow_3	Rad	Uranium-238	U-238	pCi/g	21	--[g]	50.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-1_Shallow_4	non-Rad	Aroclor-1254	11097-69-1	µg/kg	62	--[h]	30.0	--	0	1.65E-02	--	Scaled SWP SSL	--
316-1_Shallow_4	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	42,963	2.64E+06[i]	30.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-1_Shallow_4	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[h]	30.0	--	0	5.00E-03	--	Scaled SWP SSL	--
316-1_Shallow_4	Rad	Uranium-233/234	U-233/234	pCi/g	16	--[g]	30.0	--	1	---	--	Scaled SWP SSL	--
316-1_Shallow_4	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[g]	30.0	--	0	5.00E-01	--	Scaled SWP SSL	--

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{CS}{LS}\right)$ OR OR $\left(\frac{\frac{CS}{LS}}{\frac{1}{K}}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
316-1_Shallow_4	Rad	Uranium-238	U-238	pCi/g	14	--[d]	30.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-2_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	210,452	2.64E+06[f]	71.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-2_Shallow_1	Rad	Cobalt-60	10198-40-0	pCi/g	0.092	--[b]	71.0	--	0	5.00E-03	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	86	--[d]	71.0	--	1	---	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	12	--[d]	71.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_1	Rad	Uranium-238	U-238	pCi/g	69	--[d]	71.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1248	12672-29-6	µg/kg	697	133	117.0	1	0	1.65E-02	1	Scaled SWP SSL	Yes [h]
316-2_Shallow_2	non-Rad	Aroclor-1254	11097-69-1	µg/kg	42	--[b]	117.0	--	0	1.65E-02	--	Scaled SWP SSL	--
316-2_Shallow_2	non-Rad	Aroclor-1260	11096-82-5	µg/kg	110	--[b]	117.0	--	0	1.65E-02	--	Scaled SWP SSL	--
316-2_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	291,369	2.64E+06[f]	117.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-2_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.45	--[b]	117.0	--	0	5.00E-03	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Uranium-233/234	U-233/234	pCi/g	115	--[d]	117.0	--	1	---	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	11	--[d]	117.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_2	Rad	Uranium-238	U-238	pCi/g	96	--[d]	117.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-2_Shallow_3	non-Rad	Arsenic	7440-38-2	µg/kg	8,000	20,000[g]	167.5	20,000	6,470	1.00E+00	20,000	Scaled SWP SSL	No
316-2_Shallow_3	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	260	--[b]	167.5	--	0	3.30E-01	--	Scaled SWP SSL	--
316-2_Shallow_3	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	180	1.50E+06	167.5	8,983	0	3.30E-01	8,983	Scaled SWP SSL	No
316-2_Shallow_3	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	73,174	2.64E+06[f]	167.5	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-2_Shallow_3	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[d]	167.5	--	0	5.00E-01	--	Scaled SWP SSL	--
316-2_Shallow_3	Rad	Uranium-238	U-238	pCi/g	24	--[d]	167.5	--	1	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_1	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	38	--[b]	68.0	--	0	1.50E-02	--	Scaled SWP SSL	--
316-5_Shallow_1	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	146	--[b]	68.0	--	0	3.30E-01	--	Scaled SWP SSL	--
316-5_Shallow_1	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	100	1.50E+06	68.0	22,127	0	3.30E-01	22,127	Scaled SWP SSL	No
316-5_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	271,835	2.64E+06[f]	68.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-5_Shallow_1	Rad	Americium-241	14596-10-2	pCi/g	0.48	--[b]	68.0	--	0	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_1	Rad	Cesium-137	10045-97-3	pCi/g	2.3	--[b]	68.0	--	1	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	19	--[d]	68.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_1	Rad	Uranium-238	U-238	pCi/g	89	--[d]	68.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	140	210	68.0	3	0	5.00E-03	3	Scaled SWP SSL	Yes [i]
316-5_Shallow_2	non-Rad	2-Butoxyethanol	111-76-2	µg/kg	240	3.58E+07	68.0	379,013	0	3.30E-01	379,013	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	180	--[b]	68.0	--	0	3.30E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	110	1.50E+06	68.0	22,127	0	3.30E-01	22,127	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Chrysene	218-01-9	µg/kg	38	--[b]	68.0	--	0	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	146	3.56E+07	68.0	523,960	0	3.30E-01	523,960	Scaled SWP SSL	No
316-5_Shallow_2	non-Rad	Silver	7440-22-4	µg/kg	3,600	--[b]	68.0	--	167	2.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	204,701	2.64E+06[f]	68.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
316-5_Shallow_2	Rad	Americium-241	14596-10-2	pCi/g	0.12	--[b]	68.0	--	0	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Cesium-137	10045-97-3	pCi/g	1.7	--[b]	68.0	--	1	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Cobalt-60	10198-40-0	pCi/g	0.12	--[b]	68.0	--	0	5.00E-03	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Uranium-235	15117-96-1	pCi/g	9.0	--[d]	68.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_2	Rad	Uranium-238	U-238	pCi/g	68	--[d]	68.0	--	1	1.00E+00	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	57	133	68.0	2	0	1.65E-02	2	Scaled SWP SSL	Yes [h]
316-5_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	70	--[b]	68.0	--	0	1.65E-02	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	52	--[b]	68.0	--	0	1.65E-02	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	190	--[b]	68.0	--	0	3.30E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	1,500	3.56E+07	68.0	523,960	0	3.30E-01	523,960	Scaled SWP SSL	No

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g/L}{\mu g/kg}\right)\left(\frac{pCi/L}{pCi/g}\right)\left(\frac{L}{kg}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
316-5_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	138,095	2.64E+06[f]	68.0	2,640,000	3,210	--	2,640,000	Scaled SWP SSL	No
316-5_Shallow_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.8	--[b]	68.0	--	1	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	Rad	Europium-155	14391-16-3	pCi/g	0.072	--[b]	68.0	--	0	1.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	7.7	--[d]	68.0	--	0	5.00E-01	--	Scaled SWP SSL	--
316-5_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	45	--[d]	68.0	--	1	1.00E+00	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	4,4'-DDE (Dichlorodiphenyldichloroethylene)	72-55-9	µg/kg	25	--[b]	1.0	--	0	3.30E-01	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	590	2.28E+08	1.0	22,848,418	0	2.00E-02	22,848,418	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	0.56	148	1.0	148	0	1.65E-03	148	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Alpha-BHC	319-84-6	µg/kg	0.39	53	1.0	53	0	1.65E-03	53	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	360	252,032	1.0	252,032	130	6.00E-01	252,032	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	850	--[b]	1.0	--	0	1.65E-02	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	910	--[b]	1.0	--	0	3.30E-01	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	340	1.50E+06	1.0	1,504,626	0	3.30E-01	1,504,626	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Dieldrin	60-57-1	µg/kg	13	26	1.0	26	0	3.30E-03	26	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	98	3.56E+07	1.0	35,629,256	0	3.30E-01	35,629,256	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Endosulfan I	959-98-8	µg/kg	1.9	1,433	1.0	1,433	0	1.65E-03	1,433	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Endosulfan II	33213-65-9	µg/kg	3.1	1,433	1.0	1,433	0	3.30E-03	1,433	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	110	8,451	1.0	8,451	13	2.50E+00	8,451	Scaled SWP SSL	No [h]
331LSLDF_Shallow_Focused	non-Rad	Methoxychlor	72-43-5	µg/kg	3.3	--[b]	1.0	--	0	1.65E-02	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	11	1,931	1.0	1,931	0	5.00E-03	1,931	Scaled SWP SSL	No [i]
331LSLDF_Shallow_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	590	--[b]	1.0	--	470	2.00E+00	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	9,500	3.03E+06	1.0	3,025,997	0	--	3,025,997	Scaled SWP SSL	No
331LSLDF_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,100	--[b]	1.0	--	167	2.00E-01	--	Scaled SWP SSL	--
331LSLDF_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	137,000	6.41E+07	1.0	64,132,802	67,800	1.00E+00	64,132,802	Scaled SWP SSL	No [h]
600-243_Shallow	non-Rad	2-Methylnaphthalene	91-57-6	µg/kg	279	4.65E+06	40.3	115,330	0	3.30E-01	115,330	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	31	--[b]	40.3	--	0	5.00E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	1,300	252,032	40.3	6,254	130	6.00E-01	6,254	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	27	--[b]	40.3	--	0	1.65E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	18	--[b]	40.3	--	0	1.65E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Barium	7440-39-3	µg/kg	292,072	--[b]	40.3	--	132,000	5.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	43	--[b]	40.3	--	0	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	43	--[b]	40.3	--	0	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	46	--[b]	40.3	--	0	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	32	--[b]	40.3	--	0	1.50E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Beryllium	7440-41-7	µg/kg	2,079	--[b]	40.3	--	1,510	2.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	432	--[b]	40.3	--	0	3.30E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Boron	7440-42-8	µg/kg	294,463	--[c]	40.3	--	3,890	2.00E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Cadmium	7440-43-9	µg/kg	793	176,066	40.3	4,369	563	2.00E-01	4,369	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	63	--[b]	40.3	--	0	1.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Copper	7440-50-8	µg/kg	53,981	3.40E+06	40.3	84,270	22,000	1.00E+00	84,270	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Dibenzofuran	132-64-9	µg/kg	78	246,969	40.3	6,128	0	3.30E-01	6,128	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	37	3.56E+07	40.3	884,101	0	3.30E-01	884,101	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	79	2.82E+08	40.3	6,990,983	0	5.00E-02	6,990,983	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	28	--[b]	40.3	--	0	3.00E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Lead	7439-92-1	µg/kg	40,139	1.48E+06	40.3	36,831	10,200	5.00E-01	36,831	Scaled SWP SSL	Yes [h]

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg}\cdot\frac{10.00\ m^3}{L}\cdot\frac{pCi}{\mu g}\cdot\frac{L}{m^3}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
600-243_Shallow	non-Rad	Molybdenum	7439-98-7	µg/kg	1,869	--[b]	40.3	--	470	2.00E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	204	6.97E+07	40.3	1,729,533	0	2.00E+00	1,729,533	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	21,395	--[b]	40.3	--	19,100	4.00E+00	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	70	--[b]	40.3	--	0	5.00E-02	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	5,709	302,457	40.3	7,505	780	1.00E+00	7,505	Scaled SWP SSL	No
600-243_Shallow	non-Rad	Silver	7440-22-4	µg/kg	500	--[b]	40.3	--	167	2.00E-01	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	95,319	--[c]	40.3	--	0	---	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	334,524	--[c]	40.3	--	0	---	--	Scaled SWP SSL	--
600-243_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	84,099	6.41E+07	40.3	1,591,385	67,800	1.00E+00	1,591,385	Scaled SWP SSL	No [b]
600-47_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,303	2.64E+06[f]	22.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
600-47_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.4	--[d]	22.0	--	1	---	--	Scaled SWP SSL	--
600-47_Shallow	Rad	Uranium-238	U-238	pCi/g	1.6	--[d]	22.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,760	--[b]	32.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Aroclor-1260	11096-82-5	µg/kg	294	--[b]	32.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Barium	7440-39-3	µg/kg	299,000	--[b]	32.0	--	132,000	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Copper	7440-50-8	µg/kg	46,300	3.40E+06	32.0	106,127	22,000	1.00E+00	106,127	Scaled SWP SSL	No
618-1_Deep	non-Rad	Lead	7439-92-1	µg/kg	58,400	1.48E+06	32.0	46,385	10,200	5.00E-01	46,385	Scaled SWP SSL	Yes [b]
618-1_Deep	non-Rad	Mercury	7439-97-6	µg/kg	1,180	8,451	32.0	264	13	2.50E+00	264	Scaled SWP SSL	Yes [b]
618-1_Deep	non-Rad	Molybdenum	7439-98-7	µg/kg	493	--[b]	32.0	--	470	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	220	3.03E+06	32.0	94,562	0	---	94,562	Scaled SWP SSL	No
618-1_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	89,439	2.64E+06[f]	32.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-1_Deep	non-Rad	Zinc	7440-66-6	µg/kg	134,000	6.41E+07	32.0	2,004,150	67,800	1.00E+00	2,004,150	Scaled SWP SSL	No [b]
618-1_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	33	--[d]	32.0	--	1	---	--	Scaled SWP SSL	--
618-1_Deep	Rad	Uranium-235	15117-96-1	pCi/g	2.7	--[d]	32.0	--	0	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep	Rad	Uranium-238	U-238	pCi/g	32	--[d]	32.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	407	252,032	25.0	10,081	130	6.00E-01	10,081	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1.24E+06	--[b]	25.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	99	--[b]	25.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Barium	7440-39-3	µg/kg	1.87E+06	--[b]	25.0	--	132,000	5.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Boron	7440-42-8	µg/kg	6,620	--[c]	25.0	--	3,890	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,030	176,066	25.0	7,043	563	2.00E-01	7,043	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	18,900	--[b]	25.0	--	18,500	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Copper	7440-50-8	µg/kg	68,700	3.40E+06	25.0	135,843	22,000	1.00E+00	135,843	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Fluoride	16984-48-8	µg/kg	3,300	--[b]	25.0	--	2,810	5.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	333,000	1.48E+06	25.0	59,372	10,200	5.00E-01	59,372	Scaled SWP SSL	Yes [b]
618-1_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	8,940	8,451	25.0	338	13	2.50E+00	338	Scaled SWP SSL	Yes [b,e]
618-1_Deep_Focused	non-Rad	Molybdenum	7439-98-7	µg/kg	2,140	--[b]	25.0	--	470	2.00E+00	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Nitrogen In Nitrite and Nitrate	NO2+NO3-N	µg/kg	1,560	3.03E+06	25.0	121,040	0	---	121,040	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,290	--[b]	25.0	--	167	2.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	196,154	2.64E+06[f]	25.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-1_Deep_Focused	non-Rad	Zinc	7440-66-6	µg/kg	82,000	6.41E+07	25.0	2,565,312	67,800	1.00E+00	2,565,312	Scaled SWP SSL	No [b]
618-1_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	6.5	--[b]	25.0	--	1	1.00E-01	--	Scaled SWP SSL	--
618-1_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	70	--[d]	25.0	--	1	---	--	Scaled SWP SSL	--
618-1_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.5	--[d]	25.0	--	0	5.00E-01	--	Scaled SWP SSL	--

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg}\right)\left(\frac{1m}{100cm}\right)\left(\frac{pCi}{g}\right)\left(\frac{g}{\mu g}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-1_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	65	--[d]	25.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	264	--[b]	40.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	54	--[b]	40.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	31	8,451	40.0	211	13	2.50E+00	211	Scaled SWP SSL	No [h]
618-1_Shallow	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	300	3.03E+06	40.0	75,650	0	---	75,650	Scaled SWP SSL	No
618-1_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,224	2.64E+06[f]	40.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-1_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	--[d]	40.0	--	1	---	--	Scaled SWP SSL	--
618-1_Shallow	Rad	Uranium-238	U-238	pCi/g	1.5	--[d]	40.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Aluminum	7429-90-5	µg/kg	1.22E+07	--[b]	40.0	--	11,800,000	5.00E+00	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	455	252,032	40.0	6,301	130	6.00E-01	6,301	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	35	133	40.0	3	0	1.65E-02	3	Scaled SWP SSL	Yes [h]
618-1_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	981	--[b]	40.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	56	--[b]	40.0	--	0	1.65E-02	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	19,500	--[b]	40.0	--	18,500	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	23,800	3.40E+06	40.0	84,902	22,000	1.00E+00	84,902	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	198	8,451	40.0	211	13	2.50E+00	211	Scaled SWP SSL	No [h]
618-1_Shallow_Focused	non-Rad	Nitrogen in Nitrite and Nitrate	NO2+NO3-N	µg/kg	260	3.03E+06	40.0	75,650	0	---	75,650	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Silver	7440-22-4	µg/kg	1,120	--[b]	40.0	--	167	2.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	24,957	2.64E+06[f]	40.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-1_Shallow_Focused	non-Rad	Zinc	7440-66-6	µg/kg	68,100	6.41E+07	40.0	1,603,320	67,800	1.00E+00	1,603,320	Scaled SWP SSL	No [h]
618-1_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	40.0	--	1	---	--	Scaled SWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.99	--[d]	40.0	--	0	5.00E-01	--	Scaled SWP SSL	--
618-1_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	8.2	--[d]	40.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-12_Shallow	non-Rad	Arsenic	7440-38-2	µg/kg	8,557	20,000[g]	130.0	20,000	6,470	1.00E+00	20,000	Scaled SWP SSL	No
618-12_Shallow	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	63	--[b]	130.0	--	0	3.30E-01	--	Scaled SWP SSL	--
618-12_Shallow	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	60	1.50E+06	130.0	11,574	0	3.30E-01	11,574	Scaled SWP SSL	No
618-12_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	32,092	2.64E+06[f]	130.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-12_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.47	--[d]	130.0	--	0	5.00E-01	--	Scaled SWP SSL	--
618-12_Shallow	Rad	Uranium-238	U-238	pCi/g	11	--[d]	130.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Acetone	67-64-1	µg/kg	8.6	2.28E+08	40.0	571,210	0	2.00E-02	571,210	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	312	252,032	40.0	6,301	130	6.00E-01	6,301	Scaled SWP SSL	No
618-13_Shallow	non-Rad	Methylene chloride	75-09-2	µg/kg	5.1	1,931	40.0	48	0	5.00E-03	48	Scaled SWP SSL	No [i]
618-13_Shallow	non-Rad	Tin	7440-31-5	µg/kg	1,050	--[b]	40.0	--	0	1.00E+01	--	Scaled SWP SSL	--
618-13_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,061	2.64E+06[f]	40.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-13_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.9	--[d]	40.0	--	1	---	--	Scaled SWP SSL	--
618-13_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	--[d]	40.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-13_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	5.9	2.28E+08	40.0	571,210	0	2.00E-02	571,210	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	233	252,032	40.0	6,301	130	6.00E-01	6,301	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Hexavalent Chromium	18540-29-9	µg/kg	150	6,000[f]	40.0	6,000	0	---	6,000	Scaled SWP SSL	No
618-13_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	5.0	1,931	40.0	48	0	5.00E-03	48	Scaled SWP SSL	No [i]
618-13_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	745	--[b]	40.0	--	0	1.00E+01	--	Scaled SWP SSL	--
618-13_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	--[d]	40.0	--	1	---	--	Scaled SWP SSL	--
618-2_Deep	non-Rad	Tin	7440-31-5	µg/kg	2,900	--[b]	47.7	--	0	1.00E+01	--	Scaled SWP SSL	--
618-2_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	491,176	2.64E+06[f]	47.7	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-2_Deep	Rad	Americium-241	14596-10-2	pCi/g	7.9	--[b]	47.7	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep	Rad	Plutonium-238	13981-16-3	pCi/g	1.5	--[b]	47.7	--	0	1.00E+00	--	Scaled SWP SSL	--

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot \frac{(\mu g/L)}{(pCi/L)} \cdot \frac{pCi}{L} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 95th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-2_Deep	Rad	Plutonium-239/240	PU-239/240	pCi/g	91	--[b]	47.7	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep	Rad	Plutonium-241	14119-32-5	pCi/g	42	--[b]	47.7	--	0	---	--	Scaled SWP SSL	--
618-2_Deep	Rad	Total beta radiostrontium	SR-RAD	pCi/g	12	227,428	47.7	4,771	0	5.00E-03	4,771	Scaled SWP SSL	No
618-2_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	161	--[a]	47.7	--	1	---	--	Scaled SWP SSL	--
618-2_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.78	--[a]	47.7	--	0	5.00E-01	--	Scaled SWP SSL	--
618-2_Deep	Rad	Uranium-238	U-238	pCi/g	165	--[a]	47.7	--	1	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	6.9	--[b]	47.7	--	0	1.65E-02	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	27	--[b]	47.7	--	0	3.30E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	18	3.56E+07	47.7	747,467	0	3.30E-01	747,467	Scaled SWP SSL	No
618-2_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	1,200	302,457	47.7	6,345	780	1.00E+00	6,345	Scaled SWP SSL	No
618-2_Deep_Focused	non-Rad	Silver	7440-22-4	µg/kg	600	--[b]	47.7	--	367	2.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Tin	7440-31-5	µg/kg	42,500	--[b]	47.7	--	0	1.00E+01	--	Scaled SWP SSL	--
618-2_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	150,259	2.64E+06[c]	47.7	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-2_Deep_Focused	Rad	Americium-241	14596-10-2	pCi/g	9.2	--[b]	47.7	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Cesium-137	10045-97-3	pCi/g	1.1	--[b]	47.7	--	1	1.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-238	13981-16-3	pCi/g	1.6	--[b]	47.7	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-239/240	PU-239/240	pCi/g	92	--[b]	47.7	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Plutonium-241	14119-32-5	pCi/g	33	--[b]	47.7	--	0	---	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Total beta radiostrontium	SR-RAD	pCi/g	7.2	227,428	47.7	4,771	0	5.00E-03	4,771	Scaled SWP SSL	No
618-2_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	48	--[a]	47.7	--	1	---	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	2.4	--[a]	47.7	--	0	5.00E-01	--	Scaled SWP SSL	--
618-2_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	50	--[a]	47.7	--	1	1.00E+00	--	Scaled SWP SSL	--
618-2_Shallow	non-Rad	Tin	7440-31-5	µg/kg	2,400	--[b]	60.2	--	0	1.00E+01	--	Scaled SWP SSL	--
618-2_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	5,852	2.64E+06[c]	60.2	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-2_Shallow	Rad	Americium-241	14596-10-2	pCi/g	0.81	--[b]	60.2	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Cesium-137	10045-97-3	pCi/g	2.2	--[b]	60.2	--	1	1.00E-01	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Plutonium-239/240	PU-239/240	pCi/g	7.7	--[b]	60.2	--	0	1.00E+00	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	2.2	--[a]	60.2	--	1	---	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.21	--[a]	60.2	--	0	5.00E-01	--	Scaled SWP SSL	--
618-2_Shallow	Rad	Uranium-238	U-238	pCi/g	2.2	--[a]	60.2	--	1	1.00E+00	--	Scaled SWP SSL	--
618-3_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	238,577	2.64E+06[c]	52.3	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-3_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	80	--[a]	52.3	--	1	---	--	Scaled SWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	4.8	--[a]	52.3	--	0	5.00E-01	--	Scaled SWP SSL	--
618-3_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	79	--[a]	52.3	--	1	1.00E+00	--	Scaled SWP SSL	--
618-4_Deep	non-Rad	Lead	7439-92-1	µg/kg	20,000	1.48E+06	47.3	31,359	10,200	5.00E-01	31,359	Scaled SWP SSL	No [b]
618-4_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	64,506	2.64E+06[c]	47.3	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-4_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	20	--[a]	47.3	--	1	---	--	Scaled SWP SSL	--
618-4_Deep	Rad	Uranium-235	15117-96-1	pCi/g	1.1	--[a]	47.3	--	0	5.00E-01	--	Scaled SWP SSL	--
618-4_Deep	Rad	Uranium-238	U-238	pCi/g	22	--[a]	47.3	--	1	1.00E+00	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	2-Butanone	78-93-3	µg/kg	130	1.71E+08	47.3	362,231	0	3.30E-01	362,231	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Acetone	67-64-1	µg/kg	16	2.28E+08	47.3	482,713	0	2.00E-02	482,713	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	1,600	--[b]	47.3	--	0	1.65E-02	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	4,700	--[b]	47.3	--	0	3.30E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	1,500	176,066	47.3	3,720	563	2.00E-01	3,720	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Chromium	7440-47-3	µg/kg	27,700	--[b]	47.3	--	18,500	2.00E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Diethyl ether	60-29-7	µg/kg	1.0	3.98E+07	47.3	841,756	0	3.30E-03	841,756	Scaled SWP SSL	No

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protective[a] $\left(\frac{\frac{K_d}{K_H}}{\frac{1}{10}\left(\frac{\frac{[C_w]}{[C_s]}}{\beta}\right)}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 95th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-4_Deep_Focused	non-Rad	Lead	7439-92-1	µg/kg	24,900	1.48E+06	47.3	31,359	10,200	5.00E-01	31,359	Scaled SWP SSL	No [h]
618-4_Deep_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	40	1,931	47.3	41	0	5.00E-03	41	Scaled SWP SSL	No [i]
618-4_Deep_Focused	non-Rad	Phenol	108-95-2	µg/kg	110	6.21E+06	47.3	131,283	0	3.30E-01	131,283	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	24	2,345	47.3	50	0	5.00E-03	50	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Toluene	108-88-3	µg/kg	4.8	2.35E+06	47.3	49,563	0	5.00E-03	49,563	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	34,000	--[g]	47.3	--	0	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - kerosene range	TPHKEROSENE	µg/kg	42,000	--[g]	47.3	--	0	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	65	--[g]	47.3	--	0	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	20,777	2.64E+06[f]	47.3	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	3,511	47.3	74	0	5.00E-03	74	Scaled SWP SSL	No
618-4_Deep_Focused	non-Rad	Trichloromonofluoromethane	75-69-4	µg/kg	12	2.90E+07	47.3	613,695	0	---	613,695	Scaled SWP SSL	No
618-4_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	7.2	--[g]	47.3	--	1	---	--	Scaled SWP SSL	--
618-4_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.51	--[g]	47.3	--	0	5.00E-01	--	Scaled SWP SSL	--
618-4_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	6.9	--[g]	47.3	--	1	1.00E+00	--	Scaled SWP SSL	--
618-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	49,000	1.48E+06	30.0	49,477	10,200	5.00E-01	49,477	Scaled SWP SSL	No [h]
618-4_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	7,456	2.64E+06[f]	30.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	3.2	--[g]	30.0	--	1	---	--	Scaled SWP SSL	--
618-4_Shallow	Rad	Uranium-238	U-238	pCi/g	3.1	--[g]	30.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-5_Deep	non-Rad	Lead	7439-92-1	µg/kg	82,300	1.48E+06	34.2	43,401	10,200	5.00E-01	43,401	Scaled SWP SSL	Yes [h]
618-5_Deep	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	26,618	2.64E+06[f]	34.2	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-5_Deep	Rad	Uranium-233/234	U-233/234	pCi/g	8.6	--[g]	34.2	--	1	---	--	Scaled SWP SSL	--
618-5_Deep	Rad	Uranium-235	15117-96-1	pCi/g	0.46	--[g]	34.2	--	0	5.00E-01	--	Scaled SWP SSL	--
618-5_Deep	Rad	Uranium-238	U-238	pCi/g	8.9	--[g]	34.2	--	1	1.00E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Antimony	7440-36-0	µg/kg	1,800	252,032	14.1	17,875	130	6.00E-01	17,875	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Manganese	7439-96-5	µg/kg	579,000	--[j]	14.1	--	512,000	2.50E+00	--	Scaled SWP SSL	--
618-5_Deep_Focused	non-Rad	Mercury	7439-97-6	µg/kg	33	8,451	14.1	599	13	2.50E+00	599	Scaled SWP SSL	No [h]
618-5_Deep_Focused	non-Rad	Selenium	7782-49-2	µg/kg	2,270	302,457	14.1	21,451	780	1.00E+00	21,451	Scaled SWP SSL	No
618-5_Deep_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	36,540	2.64E+06[f]	14.1	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-5_Deep_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[g]	14.1	--	1	---	--	Scaled SWP SSL	--
618-5_Deep_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.48	--[g]	14.1	--	0	5.00E-01	--	Scaled SWP SSL	--
618-5_Deep_Focused	Rad	Uranium-238	U-238	pCi/g	12	--[g]	14.1	--	1	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Antimony	7440-36-0	µg/kg	560	252,032	92.0	2,739	130	6.00E-01	2,739	Scaled SWP SSL	No
618-7_Shallow_1	non-Rad	Lead	7439-92-1	µg/kg	14,567	1.48E+06	92.0	16,134	10,200	5.00E-01	16,134	Scaled SWP SSL	No [h]
618-7_Shallow_1	non-Rad	Mercury	7439-97-6	µg/kg	44	8,451	92.0	92	13	2.50E+00	92	Scaled SWP SSL	No [h]
618-7_Shallow_1	non-Rad	Nickel	7440-02-0	µg/kg	20,977	--[k]	92.0	--	19,100	4.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Tin	7440-31-5	µg/kg	1,547	--[k]	92.0	--	0	1.00E+01	--	Scaled SWP SSL	--
618-7_Shallow_1	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	10,814	2.64E+06[f]	92.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
618-7_Shallow_1	Rad	Uranium-233/234	U-233/234	pCi/g	3.6	--[g]	92.0	--	1	---	--	Scaled SWP SSL	--
618-7_Shallow_1	Rad	Uranium-235	15117-96-1	pCi/g	0.36	--[g]	92.0	--	0	5.00E-01	--	Scaled SWP SSL	--
618-7_Shallow_1	Rad	Uranium-238	U-238	pCi/g	3.6	--[g]	92.0	--	1	1.00E+00	--	Scaled SWP SSL	--
618-7_Shallow_2	non-Rad	Antimony	7440-36-0	µg/kg	660	252,032	11.0	22,912	130	6.00E-01	22,912	Scaled SWP SSL	No
618-7_Shallow_2	non-Rad	Mercury	7439-97-6	µg/kg	20	8,451	11.0	768	13	2.50E+00	768	Scaled SWP SSL	No [h]
618-7_Shallow_2	non-Rad	Tin	7440-31-5	µg/kg	1,500	--[k]	11.0	--	0	1.00E+01	--	Scaled SWP SSL	--

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water						
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot 10 \text{ or } \frac{pCi}{g} \cdot 10\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lognormal 95th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?	
618-7_Shallow_3	non-Rad	Antimony	7440-36-0	µg/kg	450	252,032	21.0	12,002	130	6.00E-01	12,002	Scaled SWP SSL	No	
618-7_Shallow_3	non-Rad	Mercury	7439-97-6	µg/kg	20	8,451	21.0	402	13	2.50E+00	402	Scaled SWP SSL	No	b
618-7_Shallow_3	non-Rad	Tin	7440-31-5	µg/kg	1,800	--[b]	21.0	--	0	1.00E+01	--	Scaled SWP SSL	--	
618-7_Shallow_4	non-Rad	Antimony	7440-36-0	µg/kg	250	252,032	48.0	5,251	130	6.00E-01	5,251	Scaled SWP SSL	No	
618-7_Shallow_4	non-Rad	Tin	7440-31-5	µg/kg	710	--[b]	48.0	--	0	1.00E+01	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Acenaphthene	83-32-9	µg/kg	150	4.94E+07	240.0	205,792	0	1.00E-01	205,792	Scaled SWP SSL	No	
618-7_Shallow_Focused	non-Rad	Antimony	7440-36-0	µg/kg	980	252,032	240.0	1,050	130	6.00E-01	1,050	Scaled SWP SSL	No	
618-7_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	6.7	133	240.0	1	0	1.65E-02	1	Scaled SWP SSL	Yes	b
618-7_Shallow_Focused	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	88	--[b]	240.0	--	0	1.50E-02	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	66	--[b]	240.0	--	0	1.50E-02	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	52	--[b]	240.0	--	0	1.50E-02	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	11	--[b]	240.0	--	0	1.50E-02	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	470	--[b]	240.0	--	0	3.30E-01	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Cadmium	7440-43-9	µg/kg	6,200	176,066	240.0	734	563	2.00E-01	734	Scaled SWP SSL	Yes	a
618-7_Shallow_Focused	non-Rad	Chromium	7440-47-3	µg/kg	65,900	--[b]	240.0	--	18,500	2.00E-01	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Chrysene	218-01-9	µg/kg	69	--[b]	240.0	--	0	1.00E-01	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Copper	7440-50-8	µg/kg	25,000	3.40E+06	240.0	14,150	22,000	1.00E+00	22,000	Background	Yes	a
618-7_Shallow_Focused	non-Rad	Dibenz(a,h)anthracene	53-70-3	µg/kg	45	--[b]	240.0	--	0	3.00E-02	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	33	3.56E+07	240.0	148,455	0	3.30E-01	148,455	Scaled SWP SSL	No	
618-7_Shallow_Focused	non-Rad	Fluoranthene	206-44-0	µg/kg	48	2.82E+08	240.0	1,173,903	0	5.00E-02	1,173,903	Scaled SWP SSL	No	
618-7_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	20	8,451	240.0	35	13	2.50E+00	35	Scaled SWP SSL	No	b
618-7_Shallow_Focused	non-Rad	Pyrene	129-00-0	µg/kg	410	--[b]	240.0	--	0	5.00E-02	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Tin	7440-31-5	µg/kg	1,200	--[b]	240.0	--	0	1.00E+01	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPH/OILH	µg/kg	680,000	--[b]	240.0	--	0	---	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	19,563	2.64E+06[c]	240.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No	
618-7_Shallow_Focused	Rad	Uranium-233/234	U-233/234	pCi/g	11	--[d]	240.0	--	1	---	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	Rad	Uranium-235	15117-96-1	pCi/g	0.97	--[d]	240.0	--	0	5.00E-01	--	Scaled SWP SSL	--	
618-7_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	6.4	--[d]	240.0	--	1	1.00E+00	--	Scaled SWP SSL	--	
618-8_Shallow	non-Rad	Selenium	7782-49-2	µg/kg	846	302,457	28.8	10,520	780	1.00E+00	10,520	Scaled SWP SSL	No	
618-8_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.2	--[d]	28.8	--	1	---	--	Scaled SWP SSL	--	
618-9_Shallow_Focused	non-Rad	1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	110	210	7.0	30	0	5.00E-03	30	Scaled SWP SSL	Yes	a
618-9_Shallow_Focused	non-Rad	Acetone	67-64-1	µg/kg	680	2.38E+08	7.0	3,264,060	0	2.00E-02	3,264,060	Scaled SWP SSL	No	
618-9_Shallow_Focused	non-Rad	Aldrin	309-00-2	µg/kg	390	148	7.0	21	0	1.65E-03	21	Scaled SWP SSL	Yes	a
618-9_Shallow_Focused	non-Rad	Aroclor-1016	12674-11-2	µg/kg	1,900	--[b]	7.0	--	0	1.65E-02	--	Scaled SWP SSL	--	
618-9_Shallow_Focused	non-Rad	Aroclor-1221	11104-28-2	µg/kg	1,900	17	7.0	2	0	1.65E-02	2	Scaled SWP SSL	Yes	bm
618-9_Shallow_Focused	non-Rad	Aroclor-1232	11141-16-5	µg/kg	1,900	17	7.0	2	0	1.65E-02	2	Scaled SWP SSL	Yes	bm
618-9_Shallow_Focused	non-Rad	Aroclor-1242	53469-21-9	µg/kg	1,900	143	7.0	20	0	1.65E-02	20	Scaled SWP SSL	Yes	bm
618-9_Shallow_Focused	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,900	133	7.0	19	0	1.65E-02	19	Scaled SWP SSL	Yes	b
618-9_Shallow_Focused	non-Rad	Aroclor-1254	11097-69-1	µg/kg	3,900	--[b]	7.0	--	0	1.65E-02	--	Scaled SWP SSL	--	
618-9_Shallow_Focused	non-Rad	Aroclor-1260	11096-82-5	µg/kg	3,900	--[b]	7.0	--	0	1.65E-02	--	Scaled SWP SSL	--	
618-9_Shallow_Focused	non-Rad	Arsenic	7440-38-2	µg/kg	11,600	20,000[e]	7.0	20,000	6,470	1.00E+00	20,000	Scaled SWP SSL	No	
618-9_Shallow_Focused	non-Rad	Bis(2-ethylhexyl) phthalate	117-81-7	µg/kg	5,200	--[b]	7.0	--	0	3.30E-01	--	Scaled SWP SSL	--	
618-9_Shallow_Focused	non-Rad	Butylbenzylphthalate	85-68-7	µg/kg	2,700	1.50E+06	7.0	214,947	0	3.30E-01	214,947	Scaled SWP SSL	No	
618-9_Shallow_Focused	non-Rad	Chlordane	57-74-9	µg/kg	69	--[b]	7.0	--	0	1.65E-02	--	Scaled SWP SSL	--	
618-9_Shallow_Focused	non-Rad	Chloroform	67-66-3	µg/kg	9.0	5,207	7.0	744	0	5.00E-03	744	Scaled SWP SSL	No	

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g}{kg} \cdot \frac{1}{\mu g/L} \cdot \frac{pCi}{g} \cdot \frac{L}{pCi}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[a]	Lagnerand 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
618-9_Shallow_Focused	non-Rad	Di-n-butylphthalate	84-74-2	µg/kg	7,200	3.56E+07	7.0	5,089,894	0	3.30E-01	5,089,894	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Heptachlor epoxide	1024-57-3	µg/kg	44	–[b]	7.0	--	0	1.65E-03	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachlorobutadiene	87-68-3	µg/kg	760	–[b]	7.0	--	0	3.30E-01	--	Scaled SWP SSL	--
618-9_Shallow_Focused	non-Rad	Hexachloroethane	67-72-1	µg/kg	17,000	29,166	7.0	4,167	0	3.30E-01	4,167	Scaled SWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Mercury	7439-97-6	µg/kg	330	8,451	7.0	1,207	13	2.50E+00	1,207	Scaled SWP SSL	No [h]
618-9_Shallow_Focused	non-Rad	Methylene chloride	75-09-2	µg/kg	2,300	1,931	7.0	276	0	5.00E-03	276	Scaled SWP SSL	Yes [m]
618-9_Shallow_Focused	non-Rad	Nitrate	14797-55-8	µg/kg	1.67E+06	1.36E+07	7.0	1,945,284	52,000	2.50E+00	1,945,284	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Tetrachloroethene	127-18-4	µg/kg	920	2,345	7.0	335	0	5.00E-03	335	Scaled SWP SSL	Yes [i]
618-9_Shallow_Focused	non-Rad	Toluene	108-88-3	µg/kg	9.0	2.35E+06	7.0	335,139	0	5.00E-03	335,139	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	8,963	2.64E+06[1]	7.0	2,640,000	3,210	—	2,640,000	Scaled SWP SSL	No
618-9_Shallow_Focused	non-Rad	Trichloroethene	79-01-6	µg/kg	2.0	3,511	7.0	502	0	5.00E-03	502	Scaled SWP SSL	No
618-9_Shallow_Focused	Rad	Uranium-238	U-238	pCi/g	3.0	–[a]	7.0	--	1	1.00E+00	--	Scaled SWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1242	53469-21-9	µg/kg	42	143	49.0	3	0	1.65E-02	3	Scaled SWP SSL	Yes [k]
628-4_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,115	133	49.0	3	0	1.65E-02	3	Scaled SWP SSL	Yes [km]
628-4_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	243	–[b]	49.0	--	0	1.65E-02	--	Scaled SWP SSL	--
628-4_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	38	–[b]	49.0	--	0	1.65E-02	--	Scaled SWP SSL	--
628-4_Shallow	non-Rad	Lead	7439-92-1	µg/kg	99,167	1.48E+06	49.0	30,292	10,200	5.00E-01	30,292	Scaled SWP SSL	Yes [k]
628-4_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.1	–[a]	49.0	--	1	—	--	Scaled SWP SSL	--
628-4_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.11	–[a]	49.0	--	0	5.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	117	4.94E+07	8.0	6,173,750	0	1.00E-01	6,173,750	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Anthracene	120-12-7	µg/kg	7.0	–[b]	8.0	--	0	5.00E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	359	252,032	8.0	31,504	130	6.00E-01	31,504	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	1,970	133	8.0	17	0	1.65E-02	17	Scaled SWP SSL	Yes [km]
UPR-300-17_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	450	–[b]	8.0	--	0	1.65E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	113	–[b]	8.0	--	0	1.65E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	59	–[b]	8.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	44	–[b]	8.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	33	–[b]	8.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	9.9	–[b]	8.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Boron	7440-42-8	µg/kg	3,903	–[a]	8.0	--	3,890	2.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	39	–[b]	8.0	--	0	1.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	35	2.82E+08	8.0	35,217,075	0	5.00E-02	35,217,075	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.9	1.06E+08	8.0	13,250,862	0	3.00E-02	13,250,862	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	5.9	–[b]	8.0	--	0	3.00E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Lead	7439-92-1	µg/kg	11,240	1.48E+06	8.0	185,538	10,200	5.00E-01	185,538	Scaled SWP SSL	No [k]
UPR-300-17_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	69	8,451	8.0	1,056	13	2.50E+00	1,056	Scaled SWP SSL	No [k]
UPR-300-17_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	48	6.97E+07	8.0	8,712,520	0	2.00E+00	8,712,520	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Nickel	7440-02-0	µg/kg	563,654	–[b]	8.0	--	19,100	4.00E+00	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	34	–[b]	8.0	--	0	5.00E-02	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Silver	7440-22-4	µg/kg	340	–[b]	8.0	--	167	2.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - diesel range	TPHDIESEL	µg/kg	2,950	–[a]	8.0	--	0	—	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Total petroleum hydrocarbons - motor oil (high boiling)	TPHOILH	µg/kg	210,420	–[a]	8.0	--	0	—	--	Scaled SWP SSL	--
UPR-300-17_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	12,420	2.64E+06[1]	8.0	2,640,000	3,210	—	2,640,000	Scaled SWP SSL	No
UPR-300-17_Shallow	non-Rad	Zinc	7440-66-6	µg/kg	157,172	6.41E+07	8.0	8,016,600	67,800	1.00E+00	8,016,600	Scaled SWP SSL	No [k]

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection[a] $\left(\frac{\mu g/L}{\mu g/kg} \text{ OR } \frac{pCi/L}{pCi/g}\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)[c]	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?
UPR-300-17_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	6.1	--[d]	8.0	--	1	---	--	Scaled SWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.91	--[d]	8.0	--	0	5.00E-01	--	Scaled SWP SSL	--
UPR-300-17_Shallow	Rad	Uranium-238	U-238	pCi/g	4.0	--[d]	8.0	--	1	1.00E+00	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Acenaphthene	83-32-9	µg/kg	13	4.94E+07	21.0	2,351,905	0	1.00E-01	2,351,905	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Antimony	7440-36-0	µg/kg	381	252,032	21.0	12,002	130	6.00E-01	12,002	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Aroclor-1248	12672-29-6	µg/kg	879	133	21.0	6	0	1.65E-02	6	Scaled SWP SSL	Yes [m]
UPR-300-46_Shallow	non-Rad	Aroclor-1254	11097-69-1	µg/kg	490	--[b]	21.0	--	0	1.65E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Aroclor-1260	11096-82-5	µg/kg	84	--[b]	21.0	--	0	1.65E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)anthracene	56-55-3	µg/kg	3.9	--[b]	21.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(a)pyrene	50-32-8	µg/kg	3.4	--[b]	21.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(b)fluoranthene	205-99-2	µg/kg	5.4	--[b]	21.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Benzo(k)fluoranthene	207-08-9	µg/kg	2.8	--[b]	21.0	--	0	1.50E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Chrysene	218-01-9	µg/kg	5.6	--[b]	21.0	--	0	1.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Dibenz(a,h)anthracene	53-70-3	µg/kg	1.3	--[b]	21.0	--	0	3.00E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Fluoranthene	206-44-0	µg/kg	9.6	2.82E+08	21.0	13,416,029	0	5.00E-02	13,416,029	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Fluorene	86-73-7	µg/kg	2.2	1.06E+08	21.0	5,047,948	0	3.00E-02	5,047,948	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	7.6	--[b]	21.0	--	0	3.00E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Mercury	7439-97-6	µg/kg	29	8,451	21.0	402	13	2.50E+00	402	Scaled SWP SSL	No [h]
UPR-300-46_Shallow	non-Rad	Naphthalene	91-20-3	µg/kg	36	6.97E+07	21.0	3,319,055	0	2.00E+00	3,319,055	Scaled SWP SSL	No
UPR-300-46_Shallow	non-Rad	Pyrene	129-00-0	µg/kg	4.4	--[b]	21.0	--	0	5.00E-02	--	Scaled SWP SSL	--
UPR-300-46_Shallow	non-Rad	Total_U_Isotopes	Total_U_Isotopes	µg/kg	4,897	2.64E+06[i]	21.0	2,640,000	3,210	---	2,640,000	Scaled SWP SSL	No
UPR-300-46_Shallow	Rad	Uranium-233/234	U-233/234	pCi/g	1.8	--[d]	21.0	--	1	---	--	Scaled SWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-235	15117-96-1	pCi/g	0.24	--[d]	21.0	--	0	5.00E-01	--	Scaled SWP SSL	--
UPR-300-46_Shallow	Rad	Uranium-238	U-238	pCi/g	1.7	--[d]	21.0	--	1	1.00E+00	--	Scaled SWP SSL	--

Notes:

a. ECF-300FFS-11-0153, 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.

b. 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.

c. Due to the complex geochemistry of uranium in 300 Area source operable unit soils, uranium SSLs were derived using a site-specific two-dimensional model as described in ECF-300FFS-11-0151. These values are derived from a 2-D model, and therefore these values are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

d. Uranium isotopes are accounted for by converting from activity-based (pCi/g) to mass-based (µg/kg) concentrations and then summing to provide a mass-based total uranium exposure point concentration (identified as Total_U_Isotopes), as described in ECF-300NPL-11-0137, Computation of Exposure Point Concentrations for the 300-FF-2 Source Operable Unit. These values are derived from a 2-D model, and therefore are not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

e. A soil screening level is not calculated because a surface water cleanup level or surface water standard is not available for the analyte.

f. The soil screening level for hexavalent chromium is set to 6,000 µg/kg based on the evaluation in ECF-Hanford-11-0185; this value is not dependent on waste site size.

g. The Hanford Site cleanup value for arsenic is 20 mg/kg based on the letter issues Associated with Establishing Soil Cleanup Levels for Arsenic published by the Department of Ecology Toxics Cleanup Program on June 11, 2013. This letter indicates that the Method A soil cleanup level of 20 mg/kg can be used to define natural background levels when developing Method B soil cleanup levels for the Hanford Site. While the measured 90th percentile background concentration of arsenic in Hanford soils is about 6.47 mg/kg, the value of 20 mg/kg is used as the applicable cleanup level. This value is not scaled by the representative waste site decision unit dimension in the general direction of groundwater flow.

h. If current Kd values (ECF-Hanford-12-0023 Rev. 3) were applied to the analysis, these contaminants would have been assigned "NR" due to the Kd exceeding the Kd breakthrough threshold; if exceedance resulted from scaling for these analytes (aroclor-1242, aroclor-1248, lead, mercury, zinc) it was dismissed based on this consideration.

i. Exceeded SWP SSL, but eliminated through further evaluation; volatile mass limited.

j. Exceeded SWP SSL but eliminated through further consideration; laboratory contaminant.

k. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1221 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. 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.

l. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for aroclor-1232 (1,900 µg/kg) is based on the maximum detection from a set of 26 samples (1 detect). The single detection was flagged with a "J" laboratory qualifier indicating it is an estimated concentration. The EPC represents a very low mass of potential contamination and there is not a

m. Exceeded before dimensionel reevaluation.

n. Exceeded SWP SSL but eliminated through further evaluation. The calculated EPC for cadmium (1,600 µg/kg) is based on the maximum detection from a set of 13 samples (3 detects). With the exception of the maximum detection, all cadmium results (detected concentrations and MDLs) 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 is unlikely to impact surface water.

o. Exceeded SWP SSL but eliminated through further evaluation; EPC is within background range.

Table 7-5. Comparison of EPCs from 300 Area Source OU Waste Site Decision Units to STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Levels Protective of Surface Water (With Background Consideration)

								Selection of Soil Screening Level Protective of Surface Water					
Waste Site/Decision Unit	Analyte Group	Analyte Name	CAS No.	Units	Exposure Point Concentration	Unit-Length STOMP 1D 70:30/100:0 Contaminant Source Model Soil Screening Level for Surface Water Protection* $\left(\frac{\mu g}{kg} \cdot m \text{ or } \frac{pCi}{g} \cdot m\right)$	Waste Site Decision Unit Representative Length in General Groundwater Flow Direction (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)*	Lognormal 90th Percentile Background Value (µg/kg or pCi/g)	Required Detection Limit (µg/kg or pCi/g)	Selected SSL Protective of Surface Water (µg/kg or pCi/g)	Basis for SSL Protective of Surface Water	Is EPC > Soil Screening Level Protective of Surface Water?

-- = Not applicable or no value

Exceedances of cleanup levels that are not eliminated under further consideration are highlighted in yellow.