Additional Information Requested during 6/21/10 phone call

1) *Sample data discrepancies were identified in the 1-5ft Samples versus data HRCR (EP-19-05-SL & EP-20-05-SL specifically mentioned).*

Samples EP-19-05-SL and EP-20-05-SL were identified as having inconsistent results between the dataset provided to the NRC (soil contour dataset) and that in the HRCR. Upon further investigation it was found that the Tc-99 results in the soil contour dataset were inferred from the U-235 results using a Tc-99/U-235 ratio of 146.1. In our review, we have identified 4 other instances of the use of inferred data in the soil contour dataset when actual Tc-99 results are reported in the HRCR. These are listed below.

Location	Tc-99 Concentration	
	Soil Contour Dataset	HRCR
EP-19-05-SL	218	11.4
EP-20-05-SL	46	3.04
NB-74-05-SL	52.52	7.49
OA-19-05-SL	44.62	1.7
PL-04-05-SL	36.58	4.5
NB-39-05-SL	34.09	2.1

Three of these locations (OA-19-05-AL, PL-04-05-SL, and NB-39-05-SL) are in the '1 – 5 ft' dataset. If the HRCR values were used in place of the inferred Tc-99 values for these 3 locations, the calculated weighted average Tc-99 concentration decreases (from 75.6 to 74.4) and the standard deviation of the dataset changes from 225.48 to 225.75. It should be noted that there are no discrepancies in the other reported analytes. The Th-232, U-234, U-235, and U-238 from the soil contour dataset and HRCR is shown below for each sample location.

Location	soil contour dataset				HRCR			
	Th-232	**U-234**	**U-235**	**U-238**	**Th-232**	**U-234**	**U235**	**U238**
EP-19-05-SL	0.97	***27.40***	1.49	10.10	0.97		1.49	10.10
EP-20-05-SL	1.59	***6.22***	0.32	0.22	1.6		0.32	0.22
NB-74-05-SL	0.96	***6.51***	0.36	1.00	0.96		0.36	1.00
OA-19-05-SL	1.31	***5.53***	0.31	0.86	1.3		0.31	0.86
PL-04-05-SL	1.09	4.44	0.25	1.21	1.1	4.4	0.25	1.21
NB-39-05-SL	0.88	***4.23***	0.23	1.09	0.88		0.23	1.09

1. Bold, italicized U-234 values were inferred per Section 14.1.4.3.3 of the DP. (U-234 values for these samples were not included in the HRCR.)

2) *Resend sensitivity analysis with total waste to US Ecology (with number of shipping months included), also resolve discrepancy in time period to be shipped (2.8 yrs vs 3 yrs)*

The table below shows the total waste volume associated for each case evaluated. As noted on the graph that was originally provided, the volume of waste into which the HDP waste was assumed to be mixed was prorated at the same rate as the incoming waste receipt rate. The shipping times indicated below are the number of weeks of receipts at

an assumed receipt rate of 13,673 tons/wk (711,000 tons/yr) which is equivalent to the indicated total waste volume.

Mean Tc-99 Shipped pCi/g	HDP Waste Shipped (ton)	Total Waste Received at USEI (ton)	Shipping Time (wks)	Disposal Area (m2)	Height of Contaminated Zone (m)	Tc-99 (cell)	Post Closure Dose (mrem)
13.5	84,850	4,000,000	293	80937	29.86	0.29	1.21
27	42,425	2,000,000	146	80937	14.93	0.57	1.92
40.5	28,283	1,333,333	98	80937	9.95	0.86	2.33
54	21,213	1,000,000	73	80937	7.47	1.15	2.59
81	14,142	666,667	49	80937	4.98	1.72	2.81
108	10,606	500,000	37	80937	3.73	2.29	2.88

HDP has repeated the above analysis based on the maximum shipping rate that could be achieved (20 rail cars/week). The volume of soil into which the HDP waste was mixed was determined based on an assumed receipt rate of 13,673 tons/wk (711,000 tons/yr).

Mean Tc-99 Shipped pCi/g	HDP Waste Shipped (ton)	Total Waste Received at USEI (ton)	Shipping Time (wks)	Disposal Area (m2)	Height of Contaminated Zone (m)	Tc-99 (cell)	Post Closure Dose (mrem)
13.5	84,850	546,923	40	80937	4.08	2.09E+00	2.861
27	42,425	273,462	20	40469	4.08	4.19E+00	3.988
40.5	28,283	182,308	13	40469	2.72	6.28E+00	4.056
54	21,213	136,731	10	40469	2.04	8.38E+00	4.069
81	14,142	91,154	7	40469	1.36	1.26E+01	4.079
108	10,606	68,365	5	40469	1.02	1.68E+01	4.078

Attachment 1 illustrates the dose resultant from shipment of the inventory of waste indicated in the 10 CFR 20.2002 application at differing concentrations and for both the baseline shipping rate and the maximum achievable rate.

3) *Elaborate on Section 3, need more details on plans, logic flow diagram, include average Tc-99 with mixing other soil*

Attachment 2 to this document provides a more detail description of the planned characterization within the area of the evaporation ponds.

4) *Provide total volume associated with elevated area*

The table below provides a summary of the soil volumes associated with the different areas around the evaporation pond which will be excavated. This table is reproduced from the sampling approach provided in Attachment 2 and is described in more detail in that attachment.

Area	volume (m3)	Tc-99 (pCi/g)
0-1 (I/S contour)	365	93.7
1-5 (I/S contour)	579	27.5
Outside contour	123	18.6
EP-08-00-SL	1.8[1]	3420
EP-10-00-SL	3.1[2]	17100
Weighted Average Tc-99 Concentration		**105**

1. Based on excavation of a 63.7 ft^2 area to a depth of 1 foot
2. Based on excavation of a 55.6 ft^2 area to a depth of 2 feet

5) *Provide consolidated set of data within elevated area including everything within elevated area*

Attachment 2 provides a consolidated set of data for the area around the evaporation pond within the area to be excavated. Data from outside the area to be excavated (but still inside the evaporation pond area) is shown in Attachment 6. This data is also provided in an excel file ("adjusted weighted average around evap pond_ final.xlsx")

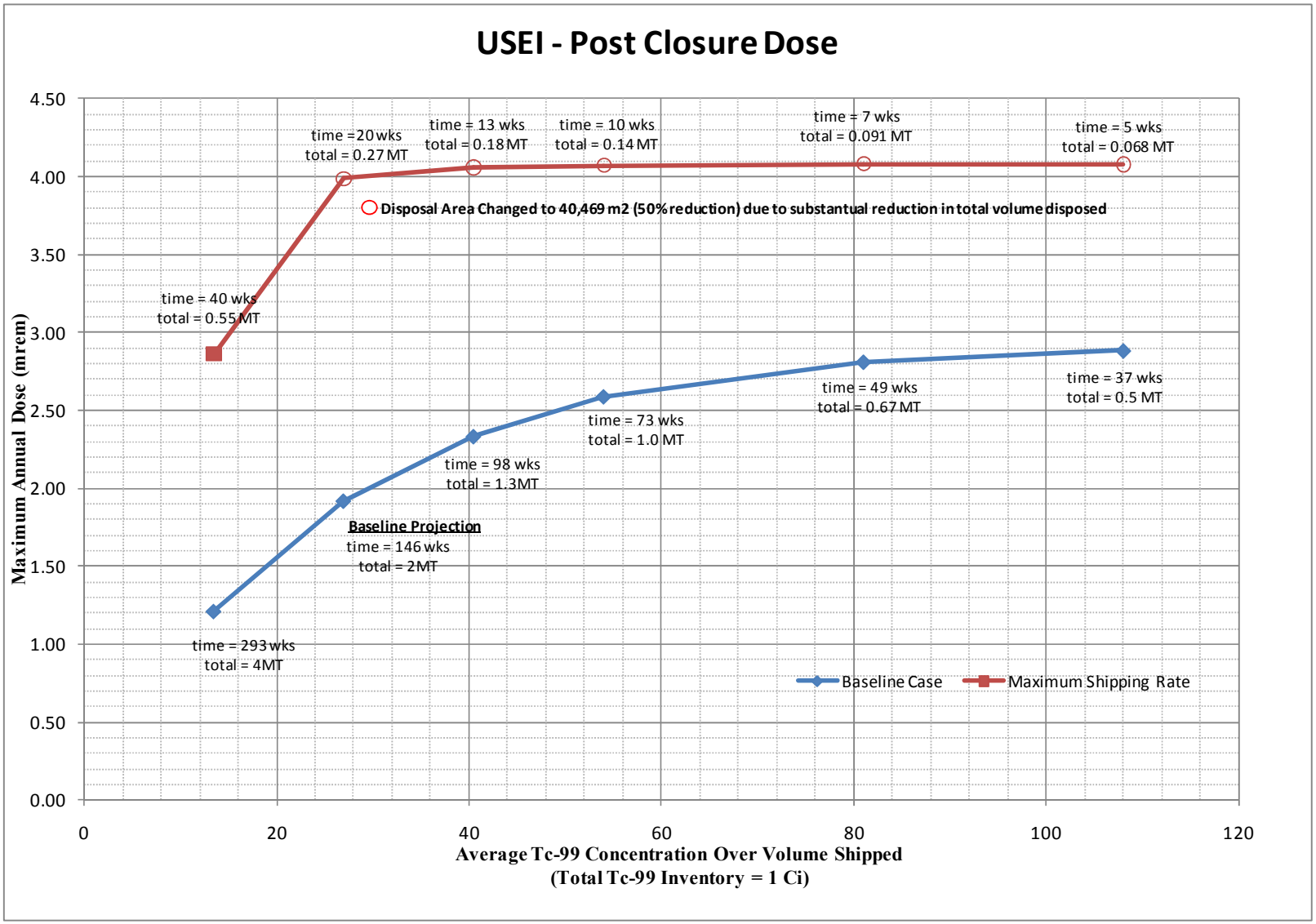
6) *Clarify >5ft Tc-99 values (average Tc-99 concentration is determined using weighted >5ft volume of soil (870 m^3) with a Tc-99 value of 0)*

The Tc-99 values for locations below 5 feet were not included in the calculations submitted with the .2002 applications due to the fact that the soil contours were based on sum of fraction calculations and the Tc-99 DCGL was very large in comparison to all of the other values. Additionally, the Tc-99 concentrations >5 foot does not contribute substantially to the overall Tc-99 concentration in the excavated soil. In the interest of having a complete dataset, the Tc-99 data associated with the datapoints indicated in the initial spreadsheet as either blank or 'NA' are tabulated below.

Sample Id	Location (dataset)	Tc-99 (pCi/g)
SS-BP-007-EL-10	> 5 foot	31.10
SS-BP-017-DV-EL-11	> 5 foot	0.27
SS-BP-018DV	> 5 foot	-0.21
SS-BP-066-CUT-EL	> 5 foot	0.85
SS-BP-075-DV-EL-7	> 5 foot	0.83
SS-BP-108B-DV	> 5 foot	0.45
SS-BP-108B-DV-EL-6	> 5 foot	0.39
WS-BP8A-10	> 5 foot	-0.08
SO-BP6A-06	Ra-226 Area	0.07
SO-BP6B-09	Ra-226 Area	0.09
SO-BP6C-12	Ra-226 Area	-0.12
SO-BP6D-12	Ra-226 Area	-0.03
SO-BP6E-14	Ra-226 Area	-0.07
SO-BP6F-09	Ra-226 Area	0.15
SO-BP6G-10	Ra-226 Area	0.34
SS-BP-028-DV	Ra-226 Area	0.19
SS-BP-028A-DV	Ra-226 Area	-0.04
SS-BP-028C-DV	Ra-226 Area	-0.15
SS-BP-028-DV-EL-9	Ra-226 Area	0.21

Inclusion of the above data within the calculation of the weighted mean and median had only a minimal impact on the resultant calculation. The mean changed from 176.1 to 176.5 pCi/g and the median changed from 27.4 to 27.5 pCi/g. Additionally, had the actual instead of inferred Tc-99 results been used for the samples described in item 1, the mean concentration would have changed to 173 pCi/g and the median would have been 23.6 pCi/g.

Attachment 1



Attachment 2
Additional Characterization of Vicinity of Evaporation Ponds

The sampling locations for the existing waste characterization data obtained from this area are illustrated by "Elevated Area One" in Figure 2, Appendix B, Attachment 1 to Westinghouse letter dated March 31, 2010 (HEM-10-38), and by Attachment 3 to this document. The laboratory analytical data from the samples of soil expected to be excavated are provided in Tables 1, 2 and 3.

Table 1
Vicinity of Evaporation Ponds (0 – 1 Foot Samples)

Sample ID	Radionuclide Concentration (pCi/g)				
	Tc-99	Th-232	U-234	U-235	U-238
EP-01-00-SL	183	2	***565***	31	92
EP-02-00-SL	219	2	***549***	30	87
EP-04-00-SL	189	3	***3,334***	184	550
EP-05-00-SL	5	1	***336***	19	89
EP-06-00-SL	51	0	***1,968***	97	52
EP-08-00-SL	3,420	1	***161***	9	27
EP-09-00-SL	111	1	***90***	5	14
EP-10-00-SL	17,100	0	***936***	51	272
EP-11-00-SL	112	1	103	4	11
FS-19-1-BIA-1-SO-1	35	1	193	10	137
FS-19-1-BIA-3-SO-1	82	6	4,070	137	389
FS-19-1-BIA-4-SO-1	33	0	230	12	44
FS-19-1-BIA-5-SO-1	32	4	1,320	48	75
SS-E.EVAP-001-SF	243	1	229	7	41
SS-GA-001-SF	376	0	***45***	2	8
SS-GA-002-SF	43	1	***39***	2	8
SS-GB-002-SF	24	1	***138***	8	31
SS-GB-004-SF	15	1	***81***	4	19
SS-GB-006-SF	19	1	***75***	4	15
SS-GB-007-SF	7	1	***21***	1	6
SS-GB-009-SF	56	1	***45***	3	9
SS-GB-022-SF	27	1	***46***	3	11
SS-GB-023-SF	17	1	***28***	2	8
SS-GL-011-SF	31	1	***117***	6	18
SS-GL-012-SF	290	0	***123***	7	14
SS-W.EVAP-001-SF	49	1	174	8	31

Note: 1. Bold, italicized U-234 values were inferred per Section 14.1.4.3.3 of the DP. (U-234 values for these samples were not included in the HRCR.)

Table 2
Vicinity of Evaporation Ponds (1 – 5 Foot Samples)

Sample ID	Radionuclide Concentration (pCi/g)				
	Tc-99	Th-232	U-234	U-235	U-238
EP-19-05-SL	11.4	1	***27***	1	10
EP-20-05-SL	3.04	2	***6***	0	0
SS-GA-001-SV	166	1	***24***	1	6
SS-GB-002-SV	1	1	***161***	9	37
SS-GB-004-SV	3	1	***183***	10	41
SS-GB-006-SV	7	1	***45***	2	11
SS-GB-007-SV	2	1	***134***	7	29
SS-GB-009-SV	90	1	***35***	2	8
SS-GB-022-SV	7	1	***45***	2	11

Sample ID	Radionuclide Concentration (pCi/g)				
	Tc-99	Th-232	U-234	U-235	U-238
SS-GL-011-SV	6	1	***79***	4	18
LB32R	25		12	1	3
LB35R	29		11	1	3
NB-74-05-SL	7.5	1	***7***	0	1

Notes: 1. Blank Cells - Not reported.
2. Bold, italicized U-234 values were inferred per Section 14.1.4.3.3 of the DP. (U-234 values for these samples were not included in the HRCR.)

HDP anticipates excavation of the entire area around the evaporation pond to a minimum depth of 1 foot. This area is shown in Attachment 3, and includes the following additional samples that are not currently located within the contour dataset described above. For completeness, the additional sampling data from the area around the evaporation pond that will not be excavated is shown in Attachment 6.

Table 3
Additional Samples From Area to be Excavated (pCi/g)

Sample ID	Tc-99	Th-232	U-234	U-235	U_238
LB31R	5.4		2.21	0.078	1.17
LB3233C4	15.6		4.98	0.35	1.8
LB34R	11.7		3.09	0.176	1.3
EP-07-00-SL	23.5	0.648	***13***	0.736	4.12
EP-12-00-SL	59.9	0.857	***87***	4.81	20.3
FS-19-1-BIA-2-SO-1	11.5	0.96	67	3.6	7.6
FS-19-1-SYS-12-SO-1	27	0.88	***39***	2.13	7.97
FS-19-1-SYS-16-SO-1	21.2	0.495	***99***	5.47	17.7
FS-19-1-SYS-19-SO-1	13.1	0.242	15.1	0.72	2.58
FS-19-1-SYS-21-SO-1	2.07	0.621	***2.4***	0.128	1.18
SS-GB-003-SF	10.5	1.13	***11***	0.6	3.43
SS-GB-010-SF	24.6	0.74	***27***	1.51	5.42
SS-GB-012-SF	14.8	0.93	***8.7***	0.48	2.12
SS-GB-013-SF	19.5	0.254	***10***	0.57	2.66

Notes: 1. Blank Cells - Not reported.
2. These samples are located within the "Elevated Area" (see Figure), outside of the contour areas, and within the top 1 foot of soil that will be excavated.
3. Bold, italicized U-234 values were inferred per Section 14.1.4.3.3 of the DP. (U-234 values for these samples were not included in the HRCR.)

Material within the vicinity of the evaporation pond will be characterized independently prior to being included with of the balance of the material shipped to USEI. Materials in this area will be intentionally mixed within the excavation during the excavation process and subsequently sampled at a rate of one composite sample (composed of approximately 4 aliquots) per 15-20 yd^3consistent with the material from the balance of the site. The samples will be analyzed by an approved offsite laboratory, and quantitative results reported for the concentration of Tc-99. Prior to shipment, the quantitative results will be evaluated to judge the variability in concentration, to ensure the USEI waste acceptance criteria (WAC) are not exceeded, and to ensure that the total inventory of Tc-99 disposed at USEI does not exceed 1 Ci.

In consideration of the presence of uranium in the samples containing the most elevated concentration of Tc-99 (locations EP-10-00-SL and EP-08-00-SL), the gamma walkover data was reviewed in order to characterize the extent of the two areas of high Tc-99 activity within the area around the evaporation pond. Using the gamma walkover data to indicate the extent of

the elevated concentrations, the volume of soil associated with these two elevated samples was estimated to be less than 5 m^3. This represents less than 0.5% of the total volume of material to be excavated, and does not significantly affect the overall concentration of Tc-99 in the soil to be excavated. Note that two larger areas east of the Evaporation Ponds also showed elevated count rates by gamma survey, however a review of the laboratory analytical data showed relatively small concentrations of Tc-99 in those areas, and therefore this soil should not cause a significant increase in the concentration of Tc-99 in the final waste form. The gamma walkover data along with the delineated area around these two locations is shown in Attachment 4.

The weighted average Tc-99 concentration within the evaporation pond area was computed based on the mean concentration and associated volume for the component areas and is provided below in Table 4. As tabulated below, the weighted average concentration is 105 pCi/g.

Table 4
Weighted Average Calculation

Area	volume (m3)	Tc-99 (pCi/g)
0-1 (I/S contour)	365	93.7
1-5 (I/S contour)	579	27.5
Outside contour	123	18.6
EP-08-00-SL	1.8[1]	3420
EP-10-00-SL	3.1[2]	17100
Weighted Average Tc-99 Concentration		**105**

Notes: 1. Based on excavation of a 63.7 ft^2 area to a depth of 1 meter
2. Based on excavation of a 55.6 ft^2 area to a depth of 2 meters

Justification of Sampling Frequency (1 per 20 yd^3):

A prospective evaluation was performed using characterization data from the entire area that HDP anticipates to be excavated to determine if the sample frequency of one sample per 20 $yd^3$is sufficient. As indicated above, the volume of soil associated with these two elevated samples was estimated to be less than 0.5% of the total volume of material to be excavated. Based on this fact, the standard deviation of the data around the evaporation pond was computed excluding these two data points (81.7 pCi/g). This is justified by the minor influence on the overall soil concentration due to the limited volume of soil containing the most elevated Tc-99 concentration, and the minimal impact on the overall concentration of Tc-99 in the soil to be excavated.

Based on the volume of the soil within the area around the evaporation pond (1072 m^3) and the predetermined sampling frequency (1 sample per 15 – 20 yd^3), the minimum number of samples that will be collected from this area will be 70 (1072 m^3x 1.308 yd^3 / m^3 / 20). This number of samples is sufficient to estimate the mean activity with a confidence interval of 16.5 pCi/g (see Attachment 5).

Decision Points

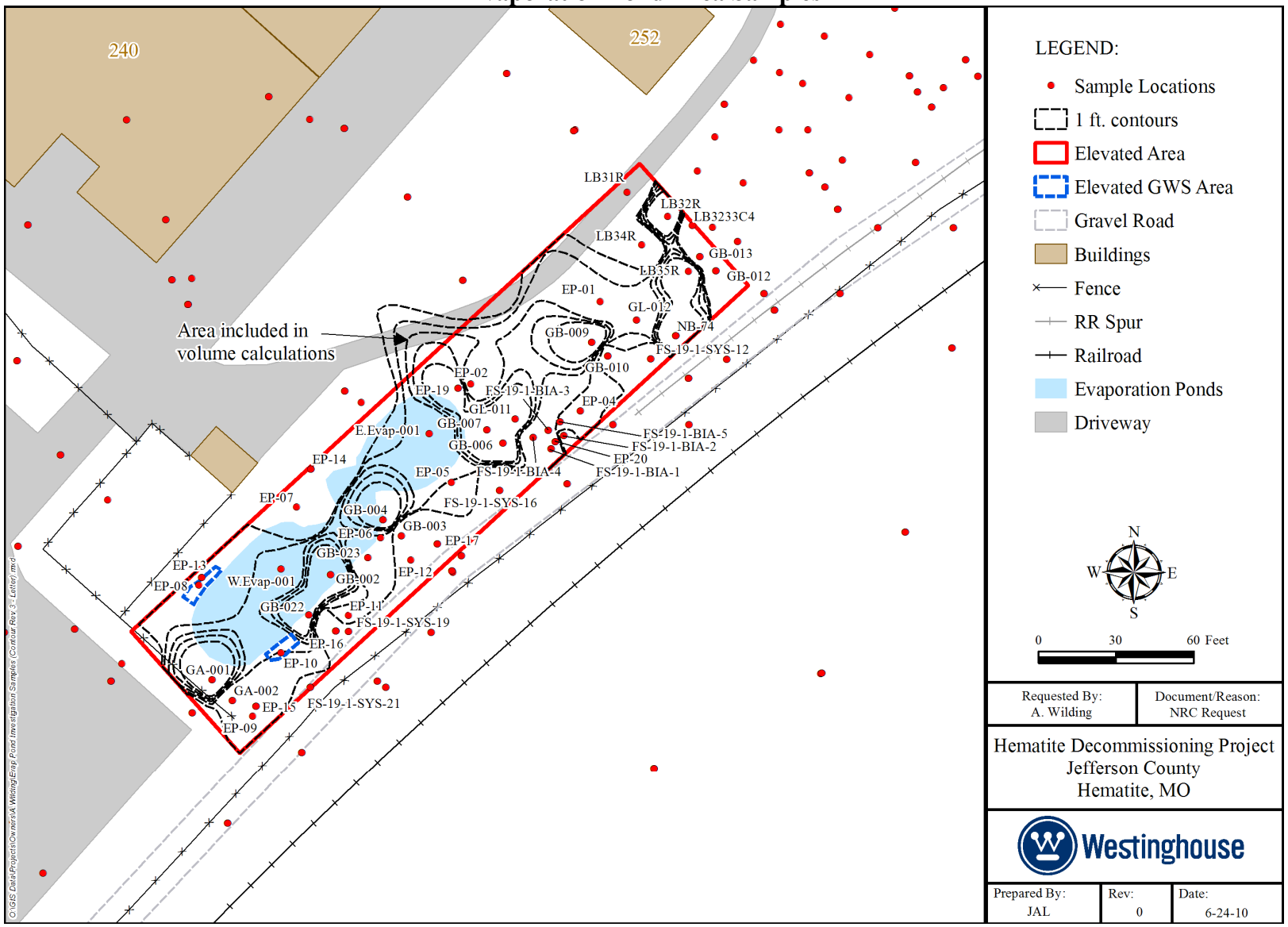
Initially, HDP will evaluate the Tc-99 laboratory analysis data prior to disposition of the material from the evaporation pound area. The concentration of Tc-99 in the material will be considered as essentially uniform provided that no individual sample exhibiting a Tc-99 concentration in excess of 2,000 pCi/g exceeds the mean of the sample population for that stockpile by more than

a factor of three. In the event this should occur, additional blending will be performed followed by additional sampling to verify this criteria has been met.

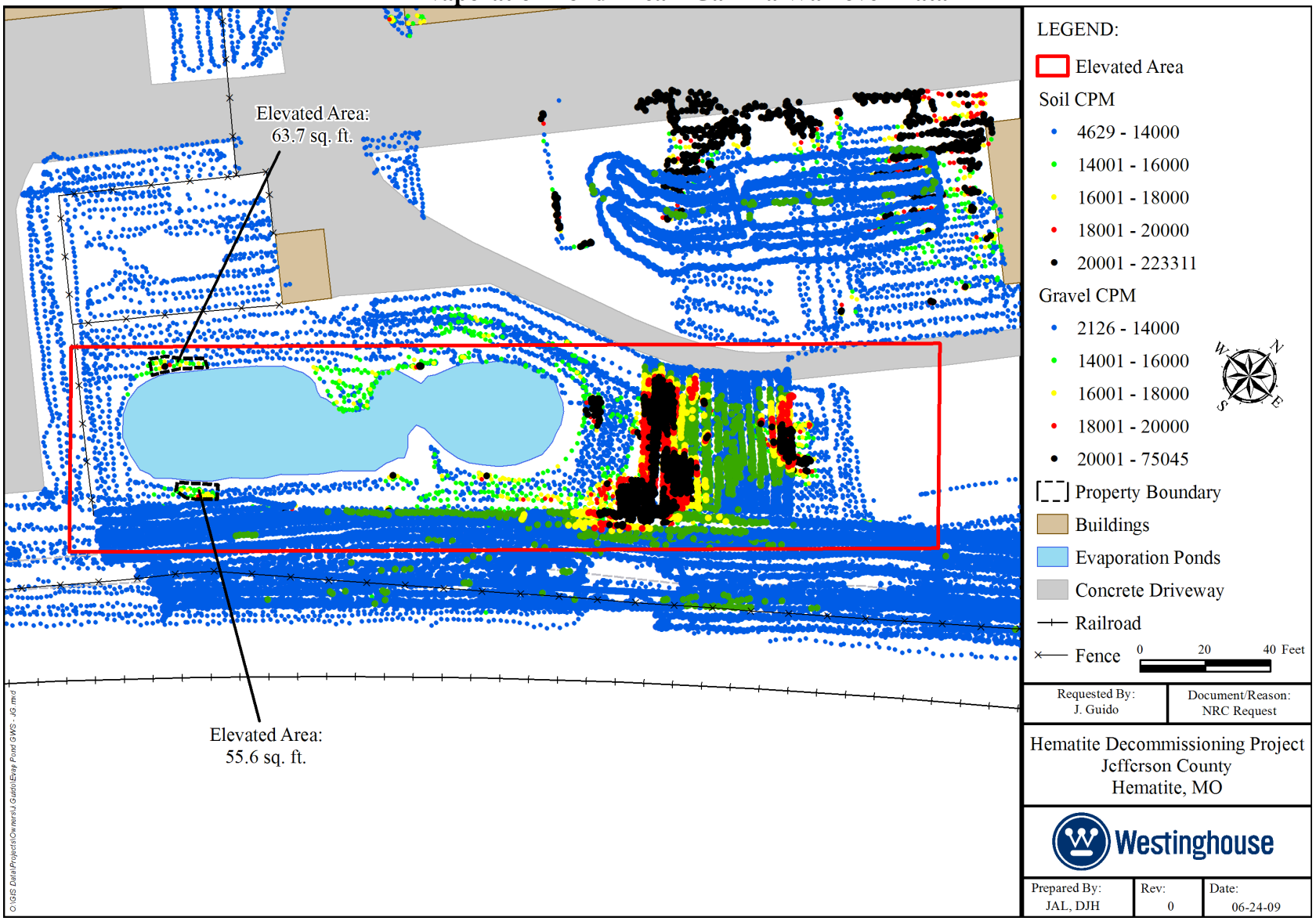
Additionally, in the event that the results for a stockpile show that the upper limit of the mean concentration exceeds 3,000 pCi/g for all radionuclides, the soil will be blended with less contaminated soil. Following blending, the surface of the soil stockpile will be re-sampled at a rate of one composite sample (composed of approximately 4 aliquots) per 15-20 yd^3consistent with the material from the balance of the site to ensure the soil concentrations for not exceed the USEI waste acceptance criteria (WAC).

Finally, an ongoing comparison of the amount of Tc-99 in soil to the amount that would cause the total inventory of disposed Tc-99 to exceed 1 Ci will be performed at the $UCL_{(0.95)}$. In the event that the $UCL_{(0.95)}$ would be exceeded, an amendment to this approval will be obtained or the soil will disposed at an alternate disposal facility that is properly permitted to receive this type of material.

Attachment 3
Evaporation Pond Area Samples



Attachment 4
Evaporation Pond Area – Gamma Walkover Data



Attachment 5
VSP Generated Sampling Plan Output

VSP Sample Design Report for Calculating a One-Sided Confidence Interval for the Population Mean Using Simple Random Sampling

Summary

This report summarizes the sampling design used, associated statistical assumptions, as well as general guidelines for conducting post-sampling data analysis. Sampling plan components presented here include how many sampling locations to choose and where within the sampling area to collect those samples. The type of medium to sample (i.e., soil, groundwater, etc.) and how to analyze the samples (in-situ, fixed laboratory, etc.) are addressed in other sections of the sampling plan.

The following table summarizes the sampling design developed.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Construct a Confidence Interval on the True Mean
Type of Sampling Design	Parametric
Sample Placement (Location) in the Field	Simple random sampling
Formula for calculating number of sampling locations	Confidence Limits using Student's t-distribution
Calculated total number of samples	69

Primary Sampling Objective

The primary purpose of sampling at this site is to construct a confidence interval on the true population mean value. After the samples are collected and analyzed, the resulting sample values can be used to construct a one-sided confidence interval. Once the confidence interval is computed (which will be an upper threshold), you can have the specified confidence that the true population mean is less than the upper threshold.

Number of Total Samples: Calculation Equation and Inputs

The equation used to calculate the number of samples is based on a confidence interval calculation using the Student's t-distribution. The formula used to calculate the number of samples is:

$$n = \left[\frac{t_{1-\alpha,df}\, S_{total}}{d} \right]^2$$

where

n is the recommended minimum sample size for the study area,

S_{total} is the estimated standard deviation due to both sampling and analytical variability,

α is the maximum acceptable probability that the true mean will not lie in the confidence interval (the confidence level is $1-\alpha$),

d is the width of the confidence interval,

$t_{1-\alpha,df}$ is the value of the Student's t-distribution with $df=n-1$ degrees of freedom such that the proportion of the distribution less than $t_{1-\alpha}$ is $1-\alpha$.

Because n appears on both sides of the equation (on the right side it appears in the degrees of freedom of the t-statistic), the equation must be solved iteratively. VSP does this automatically using the iteration scheme in Gilbert (1987, pg. 32).

The values of these inputs that result in the calculated number of sampling locations are:

Parameter				
n	***S***	**d**	**α**	**$t_{1-\alpha,df}$**
69	81.7	16 .5	5%	1.66724 [a]

[a] This value is automatically calculated by VSP based upon the user defined value of α

Statistical Assumptions

The assumptions associated with the formulas for computing the number of samples are:

1. the sample mean is normally distributed,
2. the population values are not spatially or temporally correlated, and

Attachment 5
VSP Generated Sampling Plan Output

3. the sampling locations will be selected randomly.

The first two assumptions will be assessed in a post data collection analysis. The last assumption is valid because the sample locations were selected using a random process.

This report was automatically produced* by Visual Sample Plan (VSP) software version 5.9.

Software and documentation available at http://vsp.pnl.gov

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* - The report contents may have been modified or reformatted by end-user of software.

Attachment 6
Evaporation Pond Area
Samples From Area Not Expected to be Excavated

Sample ID	Tc-99	Th-232	U-234	U-235	U-238
EP-13-03-SL	13.9	1.18	***24***	1.34	6.97
EP-14-05-SL	12.8	1.13	***1.5***	-0.274	1.54
EP-15-05-SL	3.42	1.12	***3.2***	0.171	1.64
EP-16-05-SL	2.62	1.14	2.42	0.154	1.13
EP-17-05-SL	1.17	1.13	2.67	0.148	1.15
FS-19-1-BIA-1-SO-2	1.79	1.05	10.5	0.49	2.67
FS-19-1-BIA-2-SO-2	0.88	0.89	4.04	0.151	1.32
FS-19-1-BIA-3-SO-2	0.89	0.96	42.6	2.21	7.5
FS-19-1-BIA-4-SO-2	2.45	1.06	10.9	0.53	2.58
FS-19-1-BIA-5-SO-2	1.03	1.15	36.6	1.86	7.12
FS-19-1-SYS-12-SO-2	3.03	1.17	***5.6***	0.3	2.32
FS-19-1-SYS-16-SO-2	3.76	1.07	***13***	0.72	2.76
FS-19-1-SYS-19-SO-2	0.34	1.01	4.93	0.297	1.6
FS-19-1-SYS-21-SO-2	-0.08	1.12	***1.8***	-0.04	1.84
SS-E.EVAP-001-SV	2.06	1.06	43.8	2.12	9.2
SS-GA-002-SV	3.79	1.13	***15***	0.82	4.3
SS-GB-003-SV	3.97	1.32	***23***	1.26	5.69
SS-GB-010-SV	14.7	1.03	***14***	0.76	3.67
SS-GB-012-SV	2.65	1.07	***2.0***	0.1	1.5
SS-GB-013-SV	6.94	0.95	***3.6***	0.19	1.8
SS-GB-023-SV	2.39	1.08	***67***	3.71	16.8
SS-GL-012-SV	12.3	1.08	***28***	1.55	4.63
SS-W.EVAP-001-SV	3.29	1.37	102	5.6	20
SS-GB-006-DV	1.68	1.12	***28***	1.53	7.3
SS-GB-010-DV	5.2	1.14	***3***	0.15	2.49
SS-GB-012-DV	3.37	1.42	***2.2***	0.11	1.68
EP-13-13-SL	8.58	0.979	***3.6***	0.187	2.03
EP-14-13-SL	1.53	1.17	***4.6***	0.14	-0.378
EP-15-13-SL	4.31	0.983	***1.9***	-0.142	1.89
EP-19-13-SL	10.4	1.33	***28***	1.54	9.61
EP-16-15-SL	17.1	1.01	***5.8***	0.313	2.05
EP-17-15-SL	3.74	1.26	***7.6***	0.417	1.69
EP-20-15-SL	2.74	0.943	***0.8***	0.0302	1.64
FS-19-1-BIA-1-SO-3	0.43	1.04	1.34	0.044	1
FS-19-1-BIA-2-SO-3	1.42	1.02	1	0.017	0.96
FS-19-1-BIA-3-SO-3	0.52	1.31	8.08	0.54	2.31
FS-19-1-BIA-4-SO-3	0.55	1.32	1.46	0.073	0.86
FS-19-1-BIA-5-SO-3	1.23	1.16	2.41	0.128	0.75
FS-19-1-SYS-12-SO-3	49.5	1.14	***2.2***	0.11	2

Attachment 6
Evaporation Pond Area
Samples From Area Not Expected to be Excavated

Sample ID	Tc-99	Th-232	U-234	U-235	U-238
FS-19-1-SYS-16-SO-3	0.36	1.11	***1.9***	0.1	0.84
FS-19-1-SYS-19-SO-3	3.65	1.17	1.54	0.085	1.04
FS-19-1-SYS-21-SO-3	-0.01	1.04	***1.8***	0.09	1.37
SS-GA-001-DV	17.6	1.05	***5.2***	0.28	2.04
SS-GA-002-DV	1.79	1.14	***2.1***	0.11	0.98
SS-GB-002-DV	1.66	1.14	***38***	2.09	9.8
SS-GB-004-DV	0.17	1.24	***58***	3.18	14
SS-GB-007-DV	2.5	1.38	***18***	0.97	4.7
SS-GB-009-DV	3.67	1.25	***2.7***	0.14	1.92
SS-GB-013-DV	4.15	0.87	***2.5***	0.13	1.25
NB-74-17-SL	2.81	0.921	***0***	-0.0767	-0.458
EP-13-25-SL	6.39	1.05	***0.8***	0.0234	-1.87
EP-14-25-SL	2.06	1.07	***15***	0.465	-0.46
EP-15-25-SL	11	0.469	***0.03***	0	0.0322
EP-17-25-SL	5.21	1.48	***0.8***	0.0336	1.2
EP-19-25-SL	4.77	1.26	***0***	-0.101	-0.586
EP-20-25-SL	3.93	0.844	***1.4***	0.0557	2.64
NB-74-25-SL	2.45	0.682	***0.9***	0.0276	-0.127
EP-16-27-SL	5.24	0.0587	***0.3***	-0.0704	0.341
EP-15-29-SL	0.62	0.993	***2.5***	0.0779	-1
EP-13-30-SL	131	0.98	***6.8***	0.362	0.466
EP-17-30-SL	0.0559	0.31	***0.3***	-0.272	0.315
EP-14-31-SL	0.538	0.724	***0.9***	-0.0508	0.902
EP-19-31-SL	0.708	1.32	***6.2***	0.331	0.382
NB-74-33-SL	0.485	0.532	***0***	-0.0592	-0.299

Notes: 1. These samples are located within the "Elevated Area" (see Attachment 3), and are beneath the contour areas or are outside of the contour areas and are greater than 1 foot in depth. These samples are not expected to be excavated.

2. Bold, italicized U-234 values were inferred per Section 14.1.4.3.3 of the DP . (U-234 values for these samples were not included in the HRCR.)