AR TARGET SHEET

The following document was too large to scan as one unit, therefore, it has been broken down into sections.

EDMC#:	0027913
SECTION:	4 of 4
DOCUMENT #:	DOE/RL-92-67, DRAFT B
TITLE:	Draft LFI/FFS for 1100-EM-2, 1100-EM-3, and 1100-IU-1

		QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
EE-02 06 01	SURFACE SOIL		2,420	480	580	3,490		
	SAMPLING SOIL, SED & SOLID WASTE		2,420	480	580	3,490		
	MONITOR, SAMPLE, TEST, ANALYSIS		2,420	480	580	3,490		
EE-08	SOLIDS COLLECTION & CONTAINMENT							
EE-08 01	EXCAVATION							
EE-08 01 01	Excav/Load Contaminated Soils	210.00 CY	1,790	360	640	2,790	13.27	2,3
EE-08 01 02	Transport Cont. Soils, Arlington	210.00 CY	85,790	17,160	25,740	128,680	612.77	3,4
EE-08 01 03	PPEquip, Modified Class D	1.50 DAY	1,530	310	370	2,210	1471.36	1,2
EE-08 01 04	Site Re-grading		650	130	200	980		2,3
	EXCAVATION		89,760	17,950	26,940	134,660		
	SOLIDS COLLECTION & CONTAINMENT		89,760	17,950	26,940	134,660		
	1208 Sandblast Area		92,180	18,440	27,520	138,140		
FF	JA Jones Oil Storage Tanks (2)							
FF-02	MONITOR, SAMPLE, TEST, ANALYSIS							
FF-02 06	SAMPLING SOIL, SED & SOLID WASTE							
FF-02 06 01	SURFACE SOIL		1,390	280	330	2,000		
	SAMPLING SOIL, SED & SOLID WASTE		1,390	280	330	2,000		
FF-02 11	GEOTECHNICAL TESTING							
FF-02 11 01	Geophysical Survey	2.00 EA	740	150	220	1,120	557.58	2,4
	GEOTECHNICAL TESTING		740	150	220	1,120		
	MONITOR, SAMPLE, TEST, ANALYSIS		2,130	430	560	3,120		
FF-10	TANKS/MISC DEMOLITION & REMOVAL							
FF-10 02	TANK REMOVAL							
FF-10 02 01	UST Tank Excavation & Removal	2.00 EA	3,460	690	1,040	5,190	2596.45	2,3
FF-10 02 04	PPEquip, Modified Class D	2.00 DAY	2,040	410	490	2,940	1471.36	1,2
FF-10 02 05	Site Re-grading	1.00 DAY	650	130	200	980	980.01	2,3

		QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
	TANK REMOVAL		6,160	1,230	1,730	9,120		
	TANKS/MISC DEMOLITION & REMOVAL		6,160	1,230	1,730	9,120		
FF-14	THERMAL TREATMENT							
FF-14 01	INCINERATION							
FF-14 01 01	SOLIDS PREPARATION AND HANDLING		30,390	6,080	10,840	47,320		
	INCINERATION		30,390	6,080	10,840	47,320		
	THERMAL TREATMENT		30,390	6,080	10,840	47,320		
	JA Jones Oil Storage Tanks (2)		38,690	7,740	13,130	59,550		
GG	1262 Transformer Pad							
GG-02	MONITOR, SAMPLE, TEST, ANALYSIS							
GG-02 06	SAMPLING SOIL, SED & SOLID WASTE							
GG-02 06 01	SURFACE SOIL		780	160	190	1,130		
	SAMPLING SOIL, SED & SOLID WASTE		780	160	190	1,130		
	MONITOR, SAMPLE, TEST, ANALYSIS		780	160	190	1,130		
GG-08	SOLIDS COLLECTION & CONTAINMENT							
GG-08 01	EXCAVATION							
GG-08 01 01	Excav/Load Cont. Soil & Conc Pad	1.00 CY	60	10	20	90	88.29	2,3
GG-08 01 02	Transport Cont. Soils, Arlington	1.00 CY	1,330	270	400	2,000	2001.39	3,4
GG-08 01 03	PPEquip, Modified Class D	0.25 DAY	260	50	60	370	1471.36	1,2
GG-08 01 04	Site Re-grading		330	70	100	490		2,3
	EXCAVATION		1,970	390	580	2,950		
	SOLIDS COLLECTION & CONTAINMENT		1,970	390	580	2,950		
GG-14	THERMAL TREATMENT							
GG-14 01	INCINERATION							
GG-14 01 01	SOLIDS PREPARATION AND HANDLING		6,850	1,370	2,440	10,670		

	QUANTITY	UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
INCINERATION			6,850	1,370	2,440	10,670		
THERMAL TREATMENT			6,850	1,370	2,440	10,670		
1262 Transformer Pad			9,610	1,920	3,210	14,750		
HH 1262 Solvents Tanks (4)								
HH-02 MONITOR, SAMPLE, TEST, ANALYSIS								
HH-02 06 SAMPLING SOIL, SED & SOLID WASTE								
HH-02 06 01 SURFACE SOIL			2,810	560	680	4,050		
SAMPLING SOIL, SED & SOLID WASTE			2,810	560	680	4,050		
MONITOR, SAMPLE, TEST, ANALYSIS			2,810	560	680	4,050		
HH-10 TANKS/MISC DEMOLITION & REMOVAL								
HH-10 02 TANK REMOVAL								
HH-10 02 01 UST Tank Excavation & Removal	4.00	EA	4,620	920	1,380	6,920	1730.97	2,3
HH-10 02 04 PPEquip, Modified Class D	3.00	DAY	3,070	610	740	4,410	1471.36	1,2
HH-10 02 05 Site Re-grading	1.00	DAY	650	130	200	980	980.01	2,3
TANK REMOVAL			8,330	1,670	2,320	12,320		
TANKS/MISC DEMOLITION & REMOVAL			8,330	1,670	2,320	12,320		
HH-14 THERMAL TREATMENT								
HH-14 01 INCINERATION								
HH-14 01 01 SOLIDS PREPARATION AND HANDLING			30,180	6,040	10,780	47,000		
INCINERATION			30,180	6,040	10,780	47,000		
THERMAL TREATMENT			30,180	6,040	10,780	47,000		
1262 Solvents Tanks (4)			41,330	8,270	13,770	63,370		
II 1226 Suspect Waste Oil Disposal								
II-02 MONITOR, SAMPLE, TEST, ANALYSIS								

	QUANTITY	UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
II-02 06 SAMPLING SOIL, SED & SOLID WASTE								
II-02 06 01 SURFACE SOIL			2,160	430	520	3,120		
SAMPLING SOIL, SED & SOLID WASTE			2,160	430	520	3,120		
MONITOR, SAMPLE, TEST, ANALYSIS			2,160	430	520	3,120		
II-08 SOLIDS COLLECTION & CONTAINMENT								
II-08 01 EXCAVATION								
II-08 01 01 Excav/Load Contaminated Soils	5.00	CY	70	10	30	110	22.65	2,3
II-08 01 02 Transport Cont. Soils, Arlington	5.00	CY	2,790	560	840	4,180	835.61	3,4
II-08 01 03 PPEquip, Modified Class D	1.00	DAY	1,020	200	250	1,470	1471.36	1,2
II-08 01 04 Site Re-grading			160	30	50	250		2,3
EXCAVATION			4,040	810	1,160	6,010		
SOLIDS COLLECTION & CONTAINMENT			4,040	810	1,160	6,010		
II-14 THERMAL TREATMENT								
II-14 01 INCINERATION								
II-14 01 01 SOLIDS PREPARATION AND HANDLING			205,720	41,140	73,590	320,450		
INCINERATION			205,720	41,140	73,590	320,450		
THERMAL TREATMENT			205,720	41,140	73,590	320,450		
1226 Suspect Waste Oil Disposal			211,930	42,390	75,270	329,580		
JJ JA Jones Steam Plant Drain Pad								
JJ-02 MONITOR, SAMPLE, TEST, ANALYSIS								
JJ-02 06 SAMPLING SOIL, SED & SOLID WASTE								
JJ-02 06 01 SURFACE SOIL			610	120	150	880		
SAMPLING SOIL, SED & SOLID WASTE			610	120	150	880		
JJ-02 11 GEOTECHNICAL TESTING								
JJ-02 11 01 Geophysical Survey	1.00	EA	4,650	930	1,390	6,970	6969.75	2,4

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSI03R: HANFORD: REMEDIATION - 1.4.10.1.1.23.03.2.2
1100-EM-3, Waste Site Cost Est., REVISED f/ OSI
** PROJECT OWNER SUMMARY - LEVEL 4 (Rounded to 10's) **

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
GEOTECHNICAL TESTING		4,650	930	1,390	6,970		
MONITOR, SAMPLE, TEST, ANALYSIS		5,260	1,050	1,540	7,850		
JA Jones Steam Plant Drain Pad		5,260	1,050	1,540	7,850		
HANFORD: REMEDIATION		1,024,860	204,970	295,500	1,525,330		

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSI03R: HANFORD: REMEDIATION - 1.4.10.1.1.23.03.2.2
1100-EM-3, Waste Site Cost Est., REVISED f/ OSI
** PROJECT INDIRECT SUMMARY - LEVEL 1 (Rounded to 10's) **

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SUMMARY PAGE 14

		QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
OA	MOBILIZATION/DEMOB & PREPWORK		13,620	2,040	780	1,320	140	180	18,070	
OB	COE QA/SAFETY MONITORING		19,200	2,880	1,100	1,850	200	250	25,490	
OC	EM-03 Monitoring Wells		327,100	49,070	18,810	31,600	3,380	4,300	434,250	
AA	1240 Suspect Spill Area		4,680	700	270	450	50	60	6,210	
BB	1240 French Drain		11,980	1,800	690	1,160	120	160	15,910	
CC	1212/1227 Suspect Battery Acid		79,880	11,980	4,590	7,720	820	1,050	106,040	
DD	1218 Service Station		14,980	2,250	860	1,450	150	200	19,880	
EE	1208 Sandblast Area		69,440	10,420	3,990	6,710	720	910	92,180	
FF	JA Jones Oil Storage Tanks (2)		29,140	4,370	1,680	2,810	300	380	38,690	
GG	1262 Transformer Pad		7,240	1,090	420	700	70	100	9,610	
HH	1262 Solvents Tanks (4)		31,130	4,670	1,790	3,010	320	410	41,330	
II	1226 Suspect Waste Oil Disposal		159,630	23,950	9,180	15,420	1,650	2,100	211,930	
JJ	JA Jones Steam Plant Drain Pad		3,960	590	230	380	40	50	5,260	
	HANFORD: REMEDIATION		771,980	115,800	44,390	74,570	7,970	10,150	1,024,860	
	S & A								204,970	
	SUBTOTAL								1,229,830	
	CONTINGENCY								295,500	
	TOTAL INCL OWNER COSTS								1,525,330	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
OA MOBILIZATION/DEMOB & PREPWORK									
OA-01 MOBILIZATION AND PREPATORY WORK		7,770	1,160	450	750	80	100	10,310	
OA-21 DEMOBILIZATION		5,850	880	340	570	60	80	7,770	
MOBILIZATION/DEMOB & PREPWORK		13,620	2,040	780	1,320	140	180	18,070	
OB COE QA/SAFETY MONITORING									
OB-91 QA/Safety Monitoring		19,200	2,880	1,100	1,850	200	250	25,490	
COE QA/SAFETY MONITORING		19,200	2,880	1,100	1,850	200	250	25,490	
OC EM-03 Monitoring Wells									
OC-02 MONITOR, SAMPLE, TEST, ANALYSIS		327,100	49,070	18,810	31,600	3,380	4,300	434,250	
EM-03 Monitoring Wells		327,100	49,070	18,810	31,600	3,380	4,300	434,250	
AA 1240 Suspect Spill Area									
AA-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,760	260	100	170	20	20	2,330	
AA-14 THERMAL TREATMENT		2,920	440	170	280	30	40	3,880	
1240 Suspect Spill Area		4,680	700	270	450	50	60	6,210	
BB 1240 French Drain									
BB-02 MONITOR, SAMPLE, TEST, ANALYSIS		540	80	30	50	10	10	710	
BB-14 THERMAL TREATMENT		11,450	1,720	660	1,110	120	150	15,200	
1240 French Drain		11,980	1,800	690	1,160	120	160	15,910	
CC 1212/1227 Suspect Battery Acid									
CC-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,130	320	120	210	20	30	2,830	
CC-08 SOLIDS COLLECTION & CONTAINMENT		77,750	11,660	4,470	7,510	800	1,020	103,220	
1212/1227 Suspect Battery Acid		79,880	11,980	4,590	7,720	820	1,050	106,040	
DD 1218 Service Station									
DD-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,460	220	80	140	20	20	1,940	
DD-10 TANKS/MISC DEMOLITION & REMOVAL		2,070	310	120	200	20	30	2,750	
DD-14 THERMAL TREATMENT		11,450	1,720	660	1,110	120	150	15,200	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
1218 Service Station		14,980	2,250	860	1,450	150	200	19,880	
EE 1208 Sandblast Area									
EE-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,820	270	100	180	20	20	2,420	
EE-08 SOLIDS COLLECTION & CONTAINMENT		67,610	10,140	3,890	6,530	700	890	89,760	
1208 Sandblast Area		69,440	10,420	3,990	6,710	720	910	92,180	
FF JA Jones Oil Storage Tanks (2)									
FF-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,610	240	90	160	20	20	2,130	
FF-10 TANKS/MISC DEMOLITION & REMOVAL		4,640	700	270	450	50	60	6,160	
FF-14 THERMAL TREATMENT		22,890	3,430	1,320	2,210	240	300	30,390	
JA Jones Oil Storage Tanks (2)		29,140	4,370	1,680	2,810	300	380	38,690	
GG 1262 Transformer Pad									
GG-02 MONITOR, SAMPLE, TEST, ANALYSIS		590	90	30	60	10	10	780	
GG-08 SOLIDS COLLECTION & CONTAINMENT		1,490	220	90	140	20	20	1,970	
GG-14 THERMAL TREATMENT		5,160	770	300	500	50	70	6,850	
1262 Transformer Pad		7,240	1,090	420	700	70	100	9,610	
HH 1262 Solvents Tanks (4)									
HH-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,120	320	120	200	20	30	2,810	
HH-10 TANKS/MISC DEMOLITION & REMOVAL		6,280	940	360	610	60	80	8,330	
HH-14 THERMAL TREATMENT		22,730	3,410	1,310	2,200	230	300	30,180	
1262 Solvents Tanks (4)		31,130	4,670	1,790	3,010	320	410	41,330	
II 1226 Suspect Waste Oil Disposal									
II-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,630	240	90	160	20	20	2,160	
II-08 SOLIDS COLLECTION & CONTAINMENT		3,040	460	170	290	30	40	4,040	
II-14 THERMAL TREATMENT		154,960	23,240	8,910	14,970	1,600	2,040	205,720	
1226 Suspect Waste Oil Disposal		159,630	23,950	9,180	15,420	1,650	2,100	211,930	
JJ JA Jones Steam Plant Drain Pad									
JJ-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,960	590	230	380	40	50	5,260	

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSI03R: HANFORD: REMEDIATION - 1.4.10.1.1.23.03.2.2
1100-EM-3, Waste Site Cost Est., REVISED f/ OSI
** PROJECT INDIRECT SUMMARY - LEVEL 2 (Rounded to 10's) **

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
JA Jones Steam Plant Drain Pad		3,960	590	230	380	40	50	5,260	
HANFORD: REMEDIATION		771,980	115,800	44,390	74,570	7,970	10,150	1,024,860	
S & A								204,970	
SUBTOTAL								1,229,830	
CONTINGENCY								295,500	
TOTAL INCL OWNER COSTS								1,525,330	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
0A MOBILIZATION/DEMOB & PREPWORK									
0A-01 MOBILIZATION AND PREPATORY WORK									
0A-01 01 MOB OF EQUIPMENT & PERSONNEL									
0A-01 01 01 Mob of Equipment & Facilities		2,640	400	150	250	30	30	3,500	
MOB OF EQUIPMENT & PERSONNEL		2,640	400	150	250	30	30	3,500	
0A-01 03 SETUP/CONSTRUCT TEMP FACILITIES									
0A-01 03 01 TRAILERS AND BUILDINGS	100.00 HR	2,850	430	160	280	30	40	3,780	37.84
0A-01 03 02 DECONTAMINATION FACILITIES		2,280	340	130	220	20	30	3,030	
SETUP/CONSTRUCT TEMP FACILITIES		5,130	770	290	500	50	70	6,810	
MOBILIZATION AND PREPATORY WORK		7,770	1,160	450	750	80	100	10,310	
0A-21 DEMOBILIZATION									
0A-21 04 DEMOB OF EQUIPMENT & PERSONNEL									
0A-21 04 01 Demob Equipment/Facilities		5,850	880	340	570	60	80	7,770	
DEMOB OF EQUIPMENT & PERSONNEL		5,850	880	340	570	60	80	7,770	
DEMOBILIZATION		5,850	880	340	570	60	80	7,770	
MOBILIZATION/DEMOB & PREPWORK		13,620	2,040	780	1,320	140	180	18,070	
0B COE QA/SAFETY MONITORING									
0B-91 QA/Safety Monitoring									
0B-91 01 QA/Safety Monitoring									
QA/Safety Monitoring	6.00 WK	19,200	2,880	1,100	1,850	200	250	25,490	4248.23
QA/Safety Monitoring		19,200	2,880	1,100	1,850	200	250	25,490	
COE QA/SAFETY MONITORING		19,200	2,880	1,100	1,850	200	250	25,490	
0C EM-03 Monitoring Wells									
0C-02 MONITOR, SAMPLE, TEST, ANALYSIS									

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
0C-02 04 MONITORING WELLS									
0C-02 04 01 WELL DRILLING & CONSTRUCTION	5.00 EA	297,500	44,630	17,110	28,740	3,070	3,910	394,950	78990.46
MONITORING WELLS		297,500	44,630	17,110	28,740	3,070	3,910	394,950	
0C-02 05 SAMPLING S.W./GROUND WATER/L.W.									
0C-02 05 02 GROUND WATER Sampling	20.00 EA	29,600	4,440	1,700	2,860	310	390	39,300	1964.80
SAMPLING S.W./GROUND WATER/L.W.		29,600	4,440	1,700	2,860	310	390	39,300	
MONITOR, SAMPLE, TEST, ANALYSIS		327,100	49,070	18,810	31,600	3,380	4,300	434,250	
EM-03 Monitoring Wells		327,100	49,070	18,810	31,600	3,380	4,300	434,250	
AA 1240 Suspect Spill Area									
AA-02 MONITOR, SAMPLE, TEST, ANALYSIS									
AA-02 06 SAMPLING SOIL, SED & SOLID WASTE									
AA-02 06 01 SURFACE SOIL		1,760	260	100	170	20	20	2,330	
SAMPLING SOIL, SED & SOLID WASTE		1,760	260	100	170	20	20	2,330	
MONITOR, SAMPLE, TEST, ANALYSIS		1,760	260	100	170	20	20	2,330	
AA-14 THERMAL TREATMENT									
AA-14 01 INCINERATION									
AA-14 01 01 SOLIDS PREPARATION AND HANDLING		2,920	440	170	280	30	40	3,880	
INCINERATION		2,920	440	170	280	30	40	3,880	
THERMAL TREATMENT		2,920	440	170	280	30	40	3,880	
1240 Suspect Spill Area		4,680	700	270	450	50	60	6,210	
BB 1240 French Drain									
BB-02 MONITOR, SAMPLE, TEST, ANALYSIS									
BB-02 06 SAMPLING SOIL, SED & SOLID WASTE									

		QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
BB-02 06 01	SURFACE SOIL		540	80	30	50	10	10	710	
	SAMPLING SOIL, SED & SOLID WASTE		540	80	30	50	10	10	710	
	MONITOR, SAMPLE, TEST, ANALYSIS		540	80	30	50	10	10	710	
BB-14	THERMAL TREATMENT									
BB-14 01	INCINERATION									
BB-14 01 01	SOLIDS PREPARATION AND HANDLING		11,450	1,720	660	1,110	120	150	15,200	
	INCINERATION		11,450	1,720	660	1,110	120	150	15,200	
	THERMAL TREATMENT		11,450	1,720	660	1,110	120	150	15,200	
	1240 French Drain		11,980	1,800	690	1,160	120	160	15,910	
CC	1212/1227 Suspect Battery Acid									
CC-02	MONITOR, SAMPLE, TEST, ANALYSIS									
CC-02 06	SAMPLING SOIL, SED & SOLID WASTE									
CC-02 06 01	SURFACE SOIL		2,130	320	120	210	20	30	2,830	
	SAMPLING SOIL, SED & SOLID WASTE		2,130	320	120	210	20	30	2,830	
	MONITOR, SAMPLE, TEST, ANALYSIS		2,130	320	120	210	20	30	2,830	
CC-08	SOLIDS COLLECTION & CONTAINMENT									
CC-08 01	EXCAVATION									
CC-08 01 01	Excav/Load Contaminated Soils	250.00 CY	630	100	40	60	10	10	840	3.37
CC-08 01 02	Transport Cont. Soils, Arlington	250.00 CY	76,610	11,490	4,400	7,400	790	1,010	101,700	406.79
CC-08 01 03	PPEquip, Modified Class D	0.50 DAY	380	60	20	40	0	10	510	1021.78
CC-08 01 04	Site Re-grading		120	20	10	10	0	0	160	
	EXCAVATION		77,750	11,660	4,470	7,510	800	1,020	103,220	
	SOLIDS COLLECTION & CONTAINMENT		77,750	11,660	4,470	7,510	800	1,020	103,220	
	1212/1227 Suspect Battery Acid		79,880	11,980	4,590	7,720	820	1,050	106,040	
DD	1218 Service Station									

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
DD-02 MONITOR, SAMPLE, TEST, ANALYSIS									
DD-02 06 SAMPLING SOIL, SED & SOLID WASTE									
DD-02 06 01 SURFACE SOIL		1,180	180	70	110	10	20	1,570	
SAMPLING SOIL, SED & SOLID WASTE		1,180	180	70	110	10	20	1,570	
DD-02 11 GEOTECHNICAL TESTING									
DD-02 11 01 Geophysical Survey	1.00 EA	280	40	20	30	0	0	370	371.72
GEOTECHNICAL TESTING		280	40	20	30	0	0	370	
MONITOR, SAMPLE, TEST, ANALYSIS		1,460	220	80	140	20	20	1,940	
DD-10 TANKS/MISC DEMOLITION & REMOVAL									
DD-10 02 TANK REMOVAL									
DD-10 02 01 UST Tank Excavation & Removal	1.00 EA	1,050	160	60	100	10	10	1,400	1399.07
DD-10 02 04 PPEquip, Modified Class D	1.00 DAY	770	120	40	70	10	10	1,020	1021.78
DD-10 02 05 Site Re-grading	0.50 DAY	250	40	10	20	0	0	330	653.34
TANK REMOVAL		2,070	310	120	200	20	30	2,750	
TANKS/MISC DEMOLITION & REMOVAL		2,070	310	120	200	20	30	2,750	
DD-14 THERMAL TREATMENT									
DD-14 01 INCINERATION									
DD-14 01 01 SOLIDS PREPARATION AND HANDLING		11,450	1,720	660	1,110	120	150	15,200	
INCINERATION		11,450	1,720	660	1,110	120	150	15,200	
THERMAL TREATMENT		11,450	1,720	660	1,110	120	150	15,200	
1218 Service Station		14,980	2,250	860	1,450	150	200	19,880	
EE 1208 Sandblast Area									
EE-02 MONITOR, SAMPLE, TEST, ANALYSIS									
EE-02 06 SAMPLING SOIL, SED & SOLID WASTE									

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
EE-02 06 01 SURFACE SOIL		1,820	270	100	180	20	20	2,420	
SAMPLING SOIL, SED & SOLID WASTE		1,820	270	100	180	20	20	2,420	
MONITOR, SAMPLE, TEST, ANALYSIS		1,820	270	100	180	20	20	2,420	
EE-08 SOLIDS COLLECTION & CONTAINMENT									
EE-08 01 EXCAVATION									
EE-08 01 01 Excav/Load Contaminated Soils	210.00 CY	1,350	200	80	130	10	20	1,790	8.51
EE-08 01 02 Transport Cont. Soils, Arlington	210.00 CY	64,620	9,690	3,720	6,240	670	850	85,790	408.51
EE-08 01 03 PPEquip, Modified Class D	1.50 DAY	1,150	170	70	110	10	20	1,530	1021.78
EE-08 01 04 Site Re-grading		490	70	30	50	10	10	650	
EXCAVATION		67,610	10,140	3,890	6,530	700	890	89,760	
SOLIDS COLLECTION & CONTAINMENT		67,610	10,140	3,890	6,530	700	890	89,760	
1208 Sandblast Area		69,440	10,420	3,990	6,710	720	910	92,180	
FF JA Jones Oil Storage Tanks (2)									
FF-02 MONITOR, SAMPLE, TEST, ANALYSIS									
FF-02 06 SAMPLING SOIL, SED & SOLID WASTE									
FF-02 06 01 SURFACE SOIL		1,050	160	60	100	10	10	1,390	
SAMPLING SOIL, SED & SOLID WASTE		1,050	160	60	100	10	10	1,390	
FF-02 11 GEOTECHNICAL TESTING									
FF-02 11 01 Geophysical Survey	2.00 EA	560	80	30	50	10	10	740	371.72
GEOTECHNICAL TESTING		560	80	30	50	10	10	740	
MONITOR, SAMPLE, TEST, ANALYSIS		1,610	240	90	160	20	20	2,130	
FF-10 TANKS/MISC DEMOLITION & REMOVAL									
FF-10 02 TANK REMOVAL									
FF-10 02 01 UST Tank Excavation & Removal	2.00 EA	2,610	390	150	250	30	30	3,460	1730.97
FF-10 02 04 PPEquip, Modified Class D	2.00 DAY	1,540	230	90	150	20	20	2,040	1021.78
FF-10 02 05 Site Re-grading	1.00 DAY	490	70	30	50	10	10	650	653.34

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
TANK REMOVAL		4,640	700	270	450	50	60	6,160	
TANKS/MISC DEMOLITION & REMOVAL		4,640	700	270	450	50	60	6,160	
FF-14 THERMAL TREATMENT									
FF-14 01 INCINERATION									
FF-14 01 01 SOLIDS PREPARATION AND HANDLING		22,890	3,430	1,320	2,210	240	300	30,390	
INCINERATION		22,890	3,430	1,320	2,210	240	300	30,390	
THERMAL TREATMENT		22,890	3,430	1,320	2,210	240	300	30,390	
JA Jones Oil Storage Tanks (2)		29,140	4,370	1,680	2,810	300	380	38,690	
GG 1262 Transformer Pad									
GG-02 MONITOR, SAMPLE, TEST, ANALYSIS									
GG-02 06 SAMPLING SOIL, SED & SOLID WASTE									
GG-02 06 01 SURFACE SOIL		590	90	30	60	10	10	780	
SAMPLING SOIL, SED & SOLID WASTE		590	90	30	60	10	10	780	
MONITOR, SAMPLE, TEST, ANALYSIS		590	90	30	60	10	10	780	
GG-08 SOLIDS COLLECTION & CONTAINMENT									
GG-08 01 EXCAVATION									
GG-08 01 01 Excav/Load Cont. Soil & Conc Pad	1.00 CY	40	10	0	0	0	0	60	56.60
GG-08 01 02 Transport Cont. Soils, Arlington	1.00 CY	1,010	150	60	100	10	10	1,330	1334.26
GG-08 01 03 PPEquip, Modified Class D	0.25 DAY	190	30	10	20	0	0	260	1021.78
GG-08 01 04 Site Re-grading		250	40	10	20	0	0	330	
EXCAVATION		1,490	220	90	140	20	20	1,970	
SOLIDS COLLECTION & CONTAINMENT		1,490	220	90	140	20	20	1,970	
GG-14 THERMAL TREATMENT									
GG-14 01 INCINERATION									
GG-14 01 01 SOLIDS PREPARATION AND HANDLING		5,160	770	300	500	50	70	6,850	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
INCINERATION		5,160	770	300	500	50	70	6,850	
THERMAL TREATMENT		5,160	770	300	500	50	70	6,850	
1262 Transformer Pad		7,240	1,090	420	700	70	100	9,610	
HH 1262 Solvents Tanks (4)									
HH-02 MONITOR, SAMPLE, TEST, ANALYSIS									
HH-02 06 SAMPLING SOIL, SED & SOLID WASTE									
HH-02 06 01 SURFACE SOIL		2,120	320	120	200	20	30	2,810	
SAMPLING SOIL, SED & SOLID WASTE		2,120	320	120	200	20	30	2,810	
MONITOR, SAMPLE, TEST, ANALYSIS		2,120	320	120	200	20	30	2,810	
HH-10 TANKS/MISC DEMOLITION & REMOVAL									
HH-10 02 TANK REMOVAL									
HH-10 02 01 UST Tank Excavation & Removal	4.00 EA	3,480	520	200	340	40	50	4,620	1153.98
HH-10 02 04 PPEquip, Modified Class D	3.00 DAY	2,310	350	130	220	20	30	3,070	1021.78
HH-10 02 05 Site Re-grading	1.00 DAY	490	70	30	50	10	10	650	653.34
TANK REMOVAL		6,280	940	360	610	60	80	8,330	
TANKS/MISC DEMOLITION & REMOVAL		6,280	940	360	610	60	80	8,330	
HH-14 THERMAL TREATMENT									
HH-14 01 INCINERATION									
HH-14 01 01 SOLIDS PREPARATION AND HANDLING		22,730	3,410	1,310	2,200	230	300	30,180	
INCINERATION		22,730	3,410	1,310	2,200	230	300	30,180	
THERMAL TREATMENT		22,730	3,410	1,310	2,200	230	300	30,180	
1262 Solvents Tanks (4)		31,130	4,670	1,790	3,010	320	410	41,330	
II 1226 Suspect Waste Oil Disposal									
II-02 MONITOR, SAMPLE, TEST, ANALYSIS									

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
II-02 06 SAMPLING SOIL, SED & SOLID WASTE									
II-02 06 01 SURFACE SOIL		1,630	240	90	160	20	20	2,160	
SAMPLING SOIL, SED & SOLID WASTE		1,630	240	90	160	20	20	2,160	
MONITOR, SAMPLE, TEST, ANALYSIS		1,630	240	90	160	20	20	2,160	
II-08 SOLIDS COLLECTION & CONTAINMENT									
II-08 01 EXCAVATION									
II-08 01 01 Excav/Load Contaminated Soils	5.00 CY	50	10	0	0	0	0	70	13.48
II-08 01 02 Transport Cont. Soils, Arlington	5.00 CY	2,100	310	120	200	20	30	2,790	557.08
II-08 01 03 PPEquip, Modified Class D	1.00 DAY	770	120	40	70	10	10	1,020	1021.78
II-08 01 04 Site Re-grading		120	20	10	10	0	0	160	
EXCAVATION		3,040	460	170	290	30	40	4,040	
SOLIDS COLLECTION & CONTAINMENT		3,040	460	170	290	30	40	4,040	
II-14 THERMAL TREATMENT									
II-14 01 INCINERATION									
II-14 01 01 SOLIDS PREPARATION AND HANDLING		154,960	23,240	8,910	14,970	1,600	2,040	205,720	
INCINERATION		154,960	23,240	8,910	14,970	1,600	2,040	205,720	
THERMAL TREATMENT		154,960	23,240	8,910	14,970	1,600	2,040	205,720	
1226 Suspect Waste Oil Disposal		159,630	23,950	9,180	15,420	1,650	2,100	211,930	
JJ JA Jones Steam Plant Drain Pad									
JJ-02 MONITOR, SAMPLE, TEST, ANALYSIS									
JJ-02 06 SAMPLING SOIL, SED & SOLID WASTE									
JJ-02 06 01 SURFACE SOIL		460	70	30	40	0	10	610	
SAMPLING SOIL, SED & SOLID WASTE		460	70	30	40	0	10	610	
JJ-02 11 GEOTECHNICAL TESTING									
JJ-02 11 01 Geophysical Survey	1.00 EA	3,500	530	200	340	40	50	4,650	4646.50

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
GEOTECHNICAL TESTING		3,500	530	200	340	40	50	4,650	
MONITOR, SAMPLE, TEST, ANALYSIS		3,960	590	230	380	40	50	5,260	
JA Jones Steam Plant Drain Pad		3,960	590	230	380	40	50	5,260	
HANFORD: REMEDIATION		771,980	115,800	44,390	74,570	7,970	10,150	1,024,860	
S & A								204,970	
SUBTOTAL								1,229,830	
CONTINGENCY								295,500	
TOTAL INCL OWNER COSTS								1,525,330	

O-AA. REMEDIAL GENERAL CONTRACTOR	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

O-AA. REMEDIAL GENERAL CONTRACTOR

Overhead Percentage Explanation:

Field office Overhead (FOOH): Normal is 10%, using 15% to allow for extra safety and Hanford related items.

Home office Overhead (HOOH): 4-5% is normal for this size of job.

PROFIT: 7-8% is normal for this size of job. However, PROFIT may be calculated separately for each job using the Weighted-Guide Line Method.

BOND: Calculated per dollar amount of job using B Bond rates by GOLD.

B&O TAX: 1% covers the 0.5% WA State B&O tax, and the 0.5% TARO tax.

0-AA. REMEDIAL GENERAL CONTRACTOR	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
0-AA AB. Geophysical Survey Subcontractor Assume using Sub Quote, so no further markup needed.									
0-AA AC. Soil Gas Sampling Subcontractor Assume using Sub Quote, so no further markup needed.									
0A. MOBILIZATION/DEMOB & PREPWORK This item will cover all costs for Mob/Demob & Prepwork associated with the 1100-EM-2 Area waste sites, as it is assumed one Contractor will do all sites at one time.									
0A-01. MOBILIZATION AND PREPATORY WORK									
0A-01 01. MOB OF EQUIPMENT & PERSONNEL									
0A-01 01 01. Mob of Equipment & Facilities Mob of equipment, equipment list from Summary. A 100-mi Radius assumed.									
USR AA <01505 1101 > Mob, Field Office Trailer 100-mi Radius	1.00 EA	0.00	0.00 0	0.00 0	250.00 250	0.00 0	0.00 0	250.00 250	250.00
CIV AA <01505 2103 > Mob, Hyd Excav, 1.1-1.5 CY, Cwlr Mtd, 100-mi Rad	1.00 EA N/A	0.00	0.00 0	0.00 0	525.00 525	0.00 0	0.00 0	525.00 525	525.00
USR AA <01505 3235 > Mob, FEnd Ldr, wheel 1.5-3 CY Atriculated Fr, 100-mi Radius	1.00 EA	0.00	0.00 0	0.00 0	750.00 750	0.00 0	0.00 0	750.00 750	750.00
USR AA <01505 6115 > Mob, Dozer, Crawler, 50-100 hp w/blade, incl set up 100 mi radius	1.00 EA	0.00	0.00 0	0.00 0	750.00 750	0.00 0	0.00 0	750.00 750	750.00
USR AA <01505 7131 > Mob, Water Tank, 3,000 Gal, Mtd/FT800 Trk, 100-mi Radius	1.00 EA	0.00	0.00 0	0.00 0	150.00 150	0.00 0	0.00 0	150.00 150	150.00
USR AA <01505 8921 > Mob, Decontamination Trailer w/25,000 GVW Trk, 100-mi Radius	1.00 EA	0.00	0.00 0	0.00 0	135.00 135	0.00 0	0.00 0	135.00 135	135.00
USR AA <01505 8952 > Mob, Hot Water Blstr, 3,200 psi 100-mi Radius	1.00 EA	0.00	0.00 0	0.00 0	75.00 75	0.00 0	0.00 0	75.00 75	75.00
Mob of Equipment & Facilities			0	0	2,635	0	0	2,635	
MOB OF EQUIPMENT & PERSONNEL			0	0	2,635	0	0	2,635	

0A-01. MOBILIZATION AND PREPATORY WORK	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
0A-01 03. SETUP/CONSTRUCT TEMP FACILITIES									
0A-01 03 01. TRAILERS AND BUILDINGS Allow 100 mhrs for setup of Contractor's trailer, equipment, and site layout. An allowance for some equipment and materials has been added.									
TRAILERS AND BUILDINGS	100.00 HR		0	2,500	250	100	0	2,850	28.50
0A-01 03 02. DECONTAMINATION FACILITIES									
0A-01 03 02 01. Personnel Decon Facilities Allow 80 mhrs for setup of the Personnel Decon trailer. Self contained unit includes changing rooms and showers. An allowance for some material and equipment has been included.									
Personnel Decon Facilities	80.00 HR		0	2,000	200	80	0	2,280	28.50
0A-01 03 02 02. Equip/Vehicle Decon Facilities A equipment/vehicle washdown facility exists in the 1100-EM-2 area, so assume it will be used for all waste site equipment decontamination. Decon water will be transported by a WHC truck to an on-site (Hanford) disposal area.									
Equip/Vehicle Decon Facilities			0	0	0	0	0	0	
DECONTAMINATION FACILITIES			0	2,000	200	80	0	2,280	
SETUP/CONSTRUCT TEMP FACILITIES			0	4,500	450	180	0	5,130	
MOBILIZATION AND PREPATORY WORK			0	4,500	3,085	180	0	7,765	

0A-21. DEMOBILIZATION	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
0A-21. DEMOBILIZATION											
0A-21 04. DEMOB OF EQUIPMENT & PERSONNEL											
0A-21 04 01. Demob Equipment/Facilities											
Allow 75% of Mob & Setup for Demob.											
Demob Equipment/Facilities					0	0	5,850	0	0	5,850	
DEMOB OF EQUIPMENT & PERSONNEL					0	0	5,850	0	0	5,850	
DEMOBILIZATION					0	0	5,850	0	0	5,850	
MOBILIZATION/DEMOB & PREPWORK					0	4,500	8,935	180	0	13,615	

OB-91. QA/Safety Monitoring	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

OB. COE QA/SAFETY MONITORING
This item will cover all costs associated with COE QA/Safety Monitoring for the 1100-EM-3 Area waste sites.
OB-91. QA/Safety Monitoring

OB-91 01. QA/Safety Monitoring
Safety/QA Crew:

WHC HPT:	$50/hr x 0 hrs =	$ 0	(HPT not need for the 1100-EM area, non rad)
COE Safety:	$70/hr x 40 hrs =	$2,800	
COE Special Assist. QA:	$50/hr x 8 hrs =	$ 400	
Total cost/week		$3,200	

The duration of remediation actions for the 1100-EM-3 area is estimated at 6 weeks.

QA/Safety Monitoring	6.00	WK			0	19,200	0	0	0	19,200	3200.00
QA/Safety Monitoring					0	19,200	0	0	0	19,200	
COE QA/SAFETY MONITORING					0	19,200	0	0	0	19,200	

OC-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
OC. EM-03 Monitoring Wells									
EM-03 Monitoring Wells									
Install five (5) monitoring wells to 70 Ft, and perform four (4) quarter monitoring events.									
OC-02. MONITOR, SAMPLE, TEST, ANALYSIS									
OC-02 04. MONITORING WELLS									
OC-02 04 01. WELL DRILLING & CONSTRUCTION									
Install five (5), 4" D GW Monitoring Wells to 70 LF.									
OC-02 04 01 01. 4" Dia, Monitoring Well (70 LF)									
From a recent quote (WHC/Kaiser) to drill monitoring wells in the 1100 Area, use $850/VLF. This cost includes: drilling, installation and development. All SubContr overhead markups, and all safety items are also covered by the unit cost.									
4" Dia, Monitoring Well (70 LF)	350.00 LF		0	0	0	0	297,500	297,500	850.00
WELL DRILLING & CONSTRUCTION	5.00 EA		0	0	0	0	297,500	297,500	59500.00
MONITORING WELLS			0	0	0	0	297,500	297,500	
OC-02 05. SAMPLING S.W./GROUND WATER/L.W.									
OC-02 05 02. GROUND WATER Sampling									
Given: 4 quarterly GW sampling & analysis events - $1,000 per event, per well, with 2 men @ 8 Hr each (use $30/Hr).									
GROUND WATER Sampling	20.00 EA		0	9,600	0	0	20,000	29,600	1480.00
SAMPLING S.W./GROUND WATER/L.W.			0	9,600	0	0	20,000	29,600	
MONITOR, SAMPLE, TEST, ANALYSIS			0	9,600	0	0	317,500	327,100	
EM-03 Monitoring Wells			0	9,600	0	0	317,500	327,100	

AA-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AA. 1240 Suspect Spill Area											
Waste Site: 1240 Suspect Spill Area											
Site Considerations:											
Soil & Waste Sampling											
10 x 10 x 1											
Potential Remedial Activity:											
Take soil samples, Remove waste (to TSDF, 5 CY given)											
AA-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AA-02 06. SAMPLING SOIL, SED & SOLID WASTE											
AA-02 06 01. SURFACE SOIL											
AA-02 06 01 02. Confirmatory Samples & Analyses											
Confirmatory sample & analyses. See detail for analysis cost.											
USR AA <01954 76 > pH	3.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	15.00 45	15.00 45	15.00
USR AA <01954 76 > 3050, Metals analysis	6.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	27.00 162	27.00 162	27.00
USR AA <01954 76 > 8270, BNA - Base neutral acid	3.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	357.00 1,071	357.00 1,071	357.00
USR AA <01954 76 > ?	5.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	0.00 0	0.00 0	0.00
USR AA <01954 76 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Confirmatory Samples & Analyses					0	480	0	0	1,278	1,758	
SURFACE SOIL					0	480	0	0	1,278	1,758	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	0	1,278	1,758	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	0	1,278	1,758	

AA-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AA-14. THERMAL TREATMENT											
AA-14 01. INCINERATION											
AA-14 01 01. SOLIDS PREPARATION AND HANDLING											
AA-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AA-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
AA-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	16.75	SY	ULABC	555.56	0.01 0	0.15 2	0.00 0	0.27 5	0.50 8	0.92 15	0.92
AA-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	5.60	CY	CODEG	20.00	0.08 0	2.03 11	0.60 3	0.00 0	0.00 0	2.63 15	2.63

AA-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way 20 MPH, 4 Cycles/Hr	5.60	CY	COEID	25.00	0.04 0	1.06 6	0.92 5	0.00 0	0.00 0	1.97 11	1.97
AA-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	5.60	LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 2,730	487.50 2,730	487.50
AA-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	5.09	CY	CODTE	30.00	0.04 0	1.19 6	1.46 7	0.00 0	0.00 0	2.65 13	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	1.89	CY	COEID	20.00	0.05 0	1.32 2	1.15 2	3.77 7	0.00 0	6.24 12	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	1.89	CY	CODTE	30.00	0.04 0	1.19 2	1.46 3	0.00 0	0.00 0	2.65 5	2.65
On-site Incineration	5.00	CY			4	89	35	35	2,763	2,922	584.43
SOLIDS PREPARATION AND HANDLING					4	89	35	35	2,763	2,922	
INCINERATION					4	89	35	35	2,763	2,922	
THERMAL TREATMENT					4	89	35	35	2,763	2,922	
1240 Suspect Spill Area					4	569	35	35	4,041	4,680	

BB. 1240 French Drain
Waste Site: 1240 French Drain

Site Considerations:
Soil Sampling

Potential Remedial Activity:
Take Soil Samples, Remove waste (to TSDF, 20 CY)
BB-02. MONITOR, SAMPLE, TEST, ANALYSIS

BB-02 06. SAMPLING SOIL, SED & SOLID WASTE

BB-02 06 01. SURFACE SOIL

BB-02 06 01 02. Confirmatory Samples & Analyses
Confirmatory sample & analyses. See detail for costs and tests.

BB-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 76 > PCB - In-field test					0.00	0.00	0.00	183.26	0.00	183.26	
	1.00	EA	N/A	0.00	0	0	0	183	0	183	183.26
USR AA <01954 76 > 415.1, TOC - total organic C					0.00	0.00	0.00	0.00	37.00	37.00	
	1.00	EA	N/A	0.00	0	0	0	0	37	37	37.00
USR AA <01954 76 > 9020, TOX					0.00	0.00	0.00	0.00	77.00	77.00	
	1.00	EA	N/A	0.00	0	0	0	0	77	77	77.00
USR AA <01954 76 > Sample Labor - 1 man					0.00	30.00	0.00	0.00	0.00	30.00	
	8.00	HR	N/A	0.00	0	240	0	0	0	240	30.00
Confirmatory Samples & Analyses					0	240	0	183	114	537	
SURFACE SOIL					0	240	0	183	114	537	
SAMPLING SOIL, SED & SOLID WASTE					0	240	0	183	114	537	
MONITOR, SAMPLE, TEST, ANALYSIS					0	240	0	183	114	537	

BB-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BB-14. THERMAL TREATMENT											
BB-14 01. INCINERATION											
BB-14 01 01. SOLIDS PREPARATION AND HANDLING											
BB-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
BB-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
BB-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	67.00	SY	ULABC	555.56	0.01 0	0.15 10	0.00 0	0.27 18	0.50 34	0.92 61	0.92
BB-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	22.40	CY	CODEG	20.00	0.08 2	2.03 45	0.60 13	0.00 0	0.00 0	2.63 59	2.63

BB-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way					0.04	1.06	0.92	0.00	0.00	1.97	
20 MPH, 4 Cycles/Hr	22.40	CY	COEID	25.00	1	24	21	0	0	44	1.97
BB-14 01 01 01 02B. On-site Incineration											
On-site Incineration:											
processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation											
cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, &											
operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton	22.40	LCY		0.00	0	0	0	0	10,920	10,920	487.50
Processing Rate: 5 Tons/Hr											
1 LCY = 2,940 LB = 1.5 Ton											
5T/H/1.5T/LCYx24H/D= 80.5 LCY/D											
and $325/Ton == $487.50/LCY											
BB-14 01 01 01 02C. Disposal, On-site											
Assume clean soil spread close to incinerator site. Soil is then covered											
with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	20.36	CY	CODTE	30.00	1	24	30	0	0	54	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	7.58	CY	COEID	20.00	0	10	9	29	0	47	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	7.58	CY	CODTE	30.00	0	9	11	0	0	20	2.65
On-site Incineration	20.00	CY			10	239	112	93	11,004	11,447	572.35
SOLIDS PREPARATION AND HANDLING					10	239	112	93	11,004	11,447	
INCINERATION					10	239	112	93	11,004	11,447	
THERMAL TREATMENT					10	239	112	93	11,004	11,447	
1240 French Drain					10	479	112	276	11,118	11,984	

CC-02. MONITOR, SAMPLE, TEST, ANALYSIS

CC. 1212/1227 Suspect Battery Acid
Waste Site: 1212/1227 Suspect Battery Acid Disposal Area

Site Considerations:
450 x 5 x 3

Potential Remedial Activity:
Take soil samples, Remove waste (250 CY to TSDF)
CC-02. MONITOR, SAMPLE, TEST, ANALYSIS

CC-02 06. SAMPLING SOIL, SED & SOLID WASTE

CC-02 06 01. SURFACE SOIL

CC-02 06 01 02. Confirmatory Samples & Analyses
Confirmatory sample & analyses. See detail for analysis cost.

		QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 76	> pH	13.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	15.00 195	15.00 195	15.00
USR AA <01954 76	> 1311, TCLP - toxic compound leaching procedure	13.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	112.00 1,456	112.00 1,456	112.00
USR AA <01954 76	> Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
	Confirmatory Samples & Analyses					0	480	0	0	1,651	2,131	
	SURFACE SOIL					0	480	0	0	1,651	2,131	
	SAMPLING SOIL, SED & SOLID WASTE					0	480	0	0	1,651	2,131	
	MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	0	1,651	2,131	

CC-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
CC-08. SOLIDS COLLECTION & CONTAINMENT											
CC-08 01. EXCAVATION											
CC-08 01 01. Excav/Load Contaminated Soils Quantity of 250 CY of solid wastes given by Env Engr.											
L USR AA <02220 0000 > Excavate/load solid waste					0.05	1.26	1.05	0.00	0.00	2.31	
Quantity of 250 CY given by Env Engr. Use 1.1 swell factor.	275.00	CY	XXQMV	40.00	14	347	288	0	0	635	2.31
Excav/Load Contaminated Soils	250.00	CY			14	347	288	0	0	635	2.54
CC-08 01 02. Transport Cont. Soils, Arlington Transport solid waste to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.											
USR AA <02220 0000 > Transport soil to Arlington, OR					0.00	0.00	0.00	0.00	400.00	400.00	
Assume this 5 CY will be combined with another truck load.	16.00	TRK		0.00	0	0	0	0	6,400	6,400	400.00
USR AA <02220 0000 > Disposal of waste to landfill					0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee.	426.25	TON		0.00	0	0	0	0	57,118	57,118	134.00
USR AA <02220 0000 > Oregon state environmental tax					0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax. 55 gal = 8.5 CF x 10 ea/27 CY/CF x 1.55 Ton/CY == 5 Ton.	426.25	TON		0.00	0	0	0	0	12,788	12,788	30.00
USR AA <02220 0000 > Soil profile fee					0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00	EA		0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	250.00	CY			0	0	0	0	76,605	76,605	306.42
CC-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	2.00	EA	N/A	0.00	0	0	23	0	0	23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	2.00	EA	N/A	0.00	0	0	0	15	0	15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	2.00	PR	N/A	0.00	0	0	5	0	0	5	2.30

CC-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 40	0.00 0	19.94 40	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	0.50 DAY ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
HTW AA <01951 5723 > Cartridges, Respirator	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 103	0.00 0	25.87 103	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Modified Class D	0.50 DAY		5	117	28	189	50	385	769.66
CC-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.25 DAY XXQNA	0.13	14.00 4	365.22 91	126.91 32	0.00 0	0.00 0	492.13 123	492.13
Site Re-grading			4	91	32	0	0	123	
EXCAVATION			22	555	348	189	76,655	77,748	
SOLIDS COLLECTION & CONTAINMENT			22	555	348	189	76,655	77,748	
1212/1227 Suspect Battery Acid			22	1,035	348	189	78,306	79,879	

DD-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
DD. 1218 Service Station											
Waste Site: 1218 Service Station											
Site Considerations:											
Assume 2,000 Gal tank											
Potential Remedial Activity:											
Remove UST, Ship soil to TSDF (20 CY given)											
DD-02. MONITOR, SAMPLE, TEST, ANALYSIS											
DD-02 06. SAMPLING SOIL, SED & SOLID WASTE											
DD-02 06 01. SURFACE SOIL											
DD-02 06 01 01. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory Sampling. Analyses cost in detail.											
USR AA <01954 76 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 76 > 8015, TRPH - total recoverable petroleum hydrocarbons - mod					0.00	0.00	0.00	0.00	135.00	135.00	
	4.00	EA	N/A	0.00	0	0	0	0	540	540	135.00
USR AA <01954 76 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	540	1,182	
SURFACE SOIL					0	480	0	162	540	1,182	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	540	1,182	
DD-02 11. GEOTECHNICAL TESTING											
DD-02 11 01. Geophysical Survey											
Use Geophysical Survey (Ground penetrating radar) to define tank size and location, as well as in adjacent piping. Cost based on quote from GeoRecon, Seattle, for doing several tanks at once.											
Geophysical Survey	1.00	EA			0	0	0	0	280	280	280.00
GEOTECHNICAL TESTING					0	0	0	0	280	280	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	820	1,462	

DD-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
DD-10. TANKS/MISC DEMOLITION & REMOVAL											
DD-10 02. TANK REMOVAL											
DD-10 02 01. UST Tank Excavation & Removal There is one storage tank of unknown volume. Assume the tank has 2,000 gal volume, made from steel.											
L USR AA <02220 0000 > Excavate soil around UST					0.08	2.02	1.68	0.00	0.00	3.69	
Assumes 8' D x 10' L tank, with tank taking up 25 CY.	100.00	CY	XXQMV	25.00	8	202	168	0	0	369	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk for disposal by Contractor. Allow 2 Hrs each tank. Allow $500 for tank disposal.	2.00	HR	XXQMV	1.00	2.00 4	50.42 101	41.89 84	0.00 0	250.00 500	342.31 685	342.31
UST Tank Excavation & Removal	1.00	EA			12	303	251	0	500	1,054	1053.86
DD-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow two (2) days for removal of both tanks.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	4.00	EA	N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	4.00	EA	N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	4.00	PR	N/A	0.00	0	0	9	0	0	9	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators					0.00	0.00	0.00	19.94	0.00	19.94	
	4.00	EA	N/A	0.00	0	0	0	80	0	80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.					10.00	234.30	1.45	34.83	0.00	270.58	
	1.00	DAY	ULABA	0.13	10	234	1	35	0	271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)					0.00	0.00	0.00	26.95	0.00	26.95	
	1.00	DAY	N/A	0.00	0	0	0	27	0	27	26.95
HTW AA <01951 5723 > Cartridges, Respirator					0.00	0.00	0.00	25.87	0.00	25.87	
	8.00	EA	N/A	0.00	0	0	0	207	0	207	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and					0.00	0.00	0.00	0.00	100.00	100.00	
	1.00	DAY	N/A	0.00	0	0	0	0	100	100	100.00

DD-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
equipment/vehicle decon water.									
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
DD-10 02 05. Site Re-grading Allow for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	0.50 DAY XXQNA	0.13	7	183	63	0	0	246	492.13
Site Re-grading	0.50 DAY		7	183	63	0	0	246	492.13
TANK REMOVAL			29	719	371	379	600	2,070	
TANKS/MISC DEMOLITION & REMOVAL			29	719	371	379	600	2,070	

DD-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
DD-14. THERMAL TREATMENT											
DD-14 01. INCINERATION											
DD-14 01 01. SOLIDS PREPARATION AND HANDLING											
DD-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
DD-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
DD-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	67.00	SY	ULABC	555.56	0.01 0	0.15 10	0.00 0	0.27 18	0.50 34	0.92 61	0.92
DD-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	22.40	CY	CODEG	20.00	0.08 2	2.03 45	0.60 13	0.00 0	0.00 0	2.63 59	2.63

DD-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way					0.04	1.06	0.92	0.00	0.00	1.97	
20 MPH, 4 Cycles/Hr	22.40	CY	COEID	25.00	1	24	21	0	0	44	1.97
DD-14 01 01 01 02B. On-site Incineration											
On-site Incineration:											
processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation											
cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton	22.40	LCY		0.00	0	0	0	0	10,920	10,920	487.50
Processing Rate: 5 Tons/Hr											
1 LCY = 2,940 LB = 1.5 Ton											
5T/H/1.5T/LCYx24H/D= 80.5 LCY/D											
and $325/Ton == $487.50/LCY											
DD-14 01 01 01 02C. Disposal, On-site											
Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	20.36	CY	CODTE	30.00	1	24	30	0	0	54	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	7.58	CY	COEID	20.00	0	10	9	29	0	47	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	7.58	CY	CODTE	30.00	0	9	11	0	0	20	2.65
On-site Incineration	20.00	CY			10	239	112	93	11,004	11,447	572.35
SOLIDS PREPARATION AND HANDLING					10	239	112	93	11,004	11,447	
INCINERATION					10	239	112	93	11,004	11,447	
THERMAL TREATMENT					10	239	112	93	11,004	11,447	
1218 Service Station					39	1,439	483	633	12,424	14,978	

EE-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

EE. 1208 Sandblast Area
Waste Site: 1208 Sandblast Area

Site Considerations:
Random Sampling Plan, Plume Analysis
75 x 75 x 1

Potential Remedial Activity:
Sample spent sand & soil beneath sand, remove waste.
EE-02. MONITOR, SAMPLE, TEST, ANALYSIS

EE-02 06. SAMPLING SOIL, SED & SOLID WASTE

EE-02 06 01. SURFACE SOIL

EE-02 06 01 02. Confirmatory Samples & Analyses
Confirmatory sample & analyses. Analyses cost given in detail.

USR AA <01954 76	> 1311, TCLP - toxic compound leaching procedure	12.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	112.00 1,344	112.00 1,344	112.00
USR AA <01954 76	> Sample Labor - 2 men	16.00 HR N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
	Confirmatory Samples & Analyses			0	480	0	0	1,344	1,824	
	SURFACE SOIL			0	480	0	0	1,344	1,824	
	SAMPLING SOIL, SED & SOLID WASTE			0	480	0	0	1,344	1,824	
	MONITOR, SAMPLE, TEST, ANALYSIS			0	480	0	0	1,344	1,824	

EE-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
EE-08. SOLIDS COLLECTION & CONTAINMENT											
EE-08 01. EXCAVATION											
EE-08 01 01. Excav/Load Contaminated Soils Quantity of 210 CY Contaminated Soils given by Env Engr.											
L USR AA <02220 0000 > Excavate contaminated soil					0.08	2.02	1.68	0.00	0.00	3.69	
Quantity of con. soil given by Env Engr. Use 1.1 swell factor	231.00	CY	XXQMV	25.00	18	466	387	0	0	853	3.69
USR AA <02220 0000 > Load excavated/stockpiled soil					0.03	0.68	1.46	0.00	0.00	2.13	
Load in 28-ton dump trucks - DOT approved hazardous waste hauler. Assume 3,100 lb/bcy.	231.00	CY	XXQMG	40.00	6	156	336	0	0	493	2.13
Excav/Load Contaminated Soils	210.00	CY			24	622	723	0	0	1,346	6.41
EE-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.											
USR AA <02220 0000 > Transport soil to Arlington, OR					0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	14.00	TRK		0.00	0	0	0	0	5,600	5,600	400.00
USR AA <02220 0000 > Disposal of soil in landfill					0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	358.05	TON		0.00	0	0	0	0	47,979	47,979	134.00
USR AA <02220 0000 > Oregon state environmental tax					0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	358.05	TON		0.00	0	0	0	0	10,742	10,742	30.00
USR AA <02220 0000 > Soil profile fee					0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00	EA		0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	210.00	CY			0	0	0	0	64,620	64,620	307.72
EE-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	6.00	EA	N/A	0.00	0	0	69	0	0	69	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	6.00	EA	N/A	0.00	0	0	0	45	0	45	7.55

EE-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	6.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 14	0.00 0	0.00 0	2.30 14	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	6.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 120	0.00 0	19.94 120	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	1.50	DAY	ULABA	0.13	10.00 15	234.30 351	1.45 2	34.83 52	0.00 0	270.58 406	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 40	0.00 0	26.95 40	26.95
HTW AA <01951 5723 > Cartridges, Respirator	12.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 310	0.00 0	25.87 310	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 150	100.00 150	100.00
PPEquip, Modified Class D	1.50	DAY			15	351	85	568	150	1,154	769.66
EE-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.											
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	1.00	DAY	XXQNA	0.13	14.00 14	365.22 365	126.91 127	0.00 0	0.00 0	492.13 492	492.13
Site Re-grading					14	365	127	0	0	492	
EXCAVATION					53	1,339	935	568	64,770	67,613	
SOLIDS COLLECTION & CONTAINMENT					53	1,339	935	568	64,770	67,613	
1208 Sandblast Area					53	1,819	935	568	66,114	69,437	

FF-02. MONITOR, SAMPLE, TEST, ANALYSIS

FF. JA Jones Oil Storage Tanks (2)
Waste Site: JA Jones Oil Storage Tanks (2), Unknown Volume

Site Considerations:
Soil sampling, Evaluate existing Groundwater Data.

Potential Remedial Activity:
Remove UST, Ship soil to TSDF (40 CY given)
FF-02. MONITOR, SAMPLE, TEST, ANALYSIS

FF-02 06. SAMPLING SOIL, SED & SOLID WASTE

FF-02 06 01. SURFACE SOIL

FF-02 06 01 01. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory Sampling. Analyses cost in detail.

		QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 76	> TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
		1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 76	> 8015, TRPH - total recoverable petroleum hydrocarbons - mod					0.00	0.00	0.00	0.00	135.00	135.00	
		3.00	EA	N/A	0.00	0	0	0	0	405	405	135.00
USR AA <01954 76	> Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
		16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
	Confirmatory Samples & Analyses					0	480	0	162	405	1,047	
	SURFACE SOIL					0	480	0	162	405	1,047	
	SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	405	1,047	

FF-02 11. GEOTECHNICAL TESTING

FF-02 11 01. Geophysical Survey
Use Geophysical Survey (Ground penetrating radar) to define tank size and location, as well as in adjacent piping. Cost based on quote from GeoRecon, Seattle, for doing several tanks at once.

	Geophysical Survey	2.00	EA			0	0	0	0	560	560	280.00
	GEOTECHNICAL TESTING					0	0	0	0	560	560	
	MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	965	1,607	

FF-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
FF-10. TANKS/MISC DEMOLITION & REMOVAL											
FF-10 02. TANK REMOVAL											
FF-10 02 01. UST Tank Excavation & Removal There are two Oil storage tanks of unknown volume. Assume each tank of 4,000 gal volume, made from steel.											
L USR AA <02220 0000 > Excavate soil around UST Assumes 8' D x 10' L tank, with tank taking up 25 CY.	200.00	CY	XXQMV	25.00	0.08 16	2.02 403	1.68 335	0.00 0	0.00 0	3.69 738	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk for disposal by Contractor. Allow 2 Hrs each tank. Allow $500 for tank disposal.	4.00	HR	XXQMV	1.00	2.00 8	50.42 202	41.89 168	0.00 0	250.00 1,000	342.31 1,369	342.31
USR AA <02220 0000 > Remove/dispose of 1,000 gal oil Allow $500 for disposal.	1.00	LS		0.00	0.00 0	0.00 0	0.00 0	0.00 0	500.00 500	500.00 500	500.00
UST Tank Excavation & Removal	2.00	EA			24	605	503	0	1,500	2,608	1303.86
FF-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow two (2) days for removal of both tanks.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	8.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 92	0.00 0	0.00 0	11.50 92	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	8.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 60	0.00 0	7.55 60	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	8.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 18	0.00 0	0.00 0	2.30 18	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	8.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 160	0.00 0	19.94 160	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	2.00	DAY	ULABA	0.13	10.00 20	234.30 469	1.45 3	34.83 70	0.00 0	270.58 541	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	2.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 54	0.00 0	26.95 54	26.95
HTW AA <01951 5723 > Cartridges, Respirator	16.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 414	0.00 0	25.87 414	25.87

FF-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01951 5805 > Disposal Allowance.			0.00	0.00	0.00	0.00	100.00	100.00	
Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	2.00 DAY N/A	0.00	0	0	0	0	200	200	100.00
PPEquip, Modified Class D	2.00 DAY		20	469	113	757	200	1,539	769.66
FF-10 02 05. Site Re-grading Allow for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	1.00 DAY XXQNA	0.13	14	365	127	0	0	492	492.13
Site Re-grading	1.00 DAY		14	365	127	0	0	492	492.13
TANK REMOVAL			58	1,439	743	757	1,700	4,639	
TANKS/MISC DEMOLITION & REMOVAL			58	1,439	743	757	1,700	4,639	

FF-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
FF-14. THERMAL TREATMENT											
FF-14 01. INCINERATION											
FF-14 01 01. SOLIDS PREPARATION AND HANDLING											
FF-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
FF-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	4.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 46	0.00 0	0.00 0	11.50 46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 30	0.00 0	7.55 30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	4.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 9	0.00 0	0.00 0	2.30 9	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	1.00	DAY	ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
FF-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	134.00	SY	ULABC	555.56	0.01 1	0.15 20	0.00 0	0.27 36	0.50 67	0.92 123	0.92
FF-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	44.80	CY	CODEG	20.00	0.08 3	2.03 91	0.60 27	0.00 0	0.00 0	2.63 118	2.63

FF-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way					0.04	1.06	0.92	0.00	0.00	1.97	
20 MPH, 4 Cycles/Hr	44.80	CY	COEID	25.00	2	47	41	0	0	88	1.97
FF-14 01 01 01 02B. On-site Incineration											
On-site Incineration:											
processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation											
cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, &											
operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton	44.80	LCY		0.00	0	0	0	0	21,840	21,840	487.50
Processing Rate: 5 Tons/Hr											
1 LCY = 2,940 LB = 1.5 Ton											
5T/H/1.5T/LCYx24H/D= 80.5 LCY/D											
and $325/Ton == $487.50/LCY											
FF-14 01 01 01 02C. Disposal, On-site											
Assume clean soil spread close to incinerator site. Soil is then covered											
with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	40.73	CY	CODTE	30.00	2	48	59	0	0	108	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	15.15	CY	COEID	20.00	1	20	17	57	0	95	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	15.15	CY	CODTE	30.00	1	18	22	0	0	40	2.65
On-site Incineration	40.00	CY			19	479	223	185	22,007	22,894	572.35
SOLIDS PREPARATION AND HANDLING					19	479	223	185	22,007	22,894	
INCINERATION					19	479	223	185	22,007	22,894	
THERMAL TREATMENT					19	479	223	185	22,007	22,894	
JA Jones Oil Storage Tanks (2)					77	2,397	966	1,104	24,672	29,140	

GG-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

GG. 1262 Transformer Pad
Waste Site: 1262 Transformer Pad

Site Considerations:
Soil Sampling

Potential Remedial Activity:
Sample Soil (PCB's), Remove Pad & Soil (6x6 conc pad & soil, 10 CY)
GG-02. MONITOR, SAMPLE, TEST, ANALYSIS

GG-02 06. SAMPLING SOIL, SED & SOLID WASTE

GG-02 06 01. SURFACE SOIL

GG-02 06 01	01. PCB Soil Samples & Analyses Sample & analyze soil for PCBs. Two in-field tests at $340. Allow 2 men for 1/2 day for sampling (8 Hrs @ $30/Hr). PCB Soil Samples & Analyses		0	240	10	340	0	590	
	SURFACE SOIL		0	240	10	340	0	590	
	SAMPLING SOIL, SED & SOLID WASTE		0	240	10	340	0	590	
	MONITOR, SAMPLE, TEST, ANALYSIS		0	240	10	340	0	590	

GG-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
GG-08. SOLIDS COLLECTION & CONTAINMENT											
GG-08 01. EXCAVATION											
GG-08 01 01. Excav/Load Cont. Soil & Conc Pad Quantity of 1 CY for concrete pad given by Env Engr.											
L USR AA <02220 0000 > Excavate con. soil & demo pad					0.40	10.08	8.38	0.00	0.00	18.46	
Quantity of con. soil and conc pad given by Env Engr. Use a 1.2 swell factor.	1.20	CY	XXQMV	5.00	0	12	10	0	0	22	18.46
USR AA <02220 0000 > Load excavated soil & conc pad					0.20	5.42	11.65	0.00	0.00	17.06	
Load in 28-ton dump trucks - DOT approved hazardous waste hauler. Assume 3,100 lb/bcy.	1.20	CY	XXQMG	5.00	0	7	14	0	0	20	17.06
Excav/Load Cont. Soil & Conc Pad	1.00	CY			1	19	24	0	0	43	42.63
GG-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.											
USR AA <02220 0000 > Transport soil to Arlington, OR					0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	1.00	TRK		0.00	0	0	0	0	400	400	400.00
USR AA <02220 0000 > Disposal of soil in landfill					0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	1.86	TON		0.00	0	0	0	0	249	249	134.00
USR AA <02220 0000 > Oregon state environmental tax					0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	1.86	TON		0.00	0	0	0	0	56	56	30.00
USR AA <02220 0000 > Soil profile fee					0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00	EA		0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	1.00	CY			0	0	0	0	1,005	1,005	1005.04
GG-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	1.00	EA	N/A	0.00	0	0	12	0	0	12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	1.00	EA	N/A	0.00	0	0	0	8	0	8	7.55

GG-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00 PR N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	1.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 20	0.00 0	19.94 20	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	0.25 DAY ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
HTW AA <01951 5723 > Cartridges, Respirator	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 52	0.00 0	25.87 52	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Modified Class D	0.25 DAY		3	59	14	95	25	192	769.66
GG-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.50 DAY XXQNA	0.13	14.00 7	365.22 183	126.91 63	0.00 0	0.00 0	492.13 246	492.13
Site Re-grading			7	183	63	0	0	246	
EXCAVATION			10	260	102	95	1,030	1,486	
SOLIDS COLLECTION & CONTAINMENT			10	260	102	95	1,030	1,486	

GG-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
GG-14. THERMAL TREATMENT											
GG-14 01. INCINERATION											
GG-14 01 01. SOLIDS PREPARATION AND HANDLING											
GG-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
GG-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
GG-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	30.15	SY	ULABC	555.56	0.01 0	0.15 4	0.00 0	0.27 8	0.50 15	0.92 28	0.92
GG-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	10.08	CY	CODEG	20.00	0.08 1	2.03 20	0.60 6	0.00 0	0.00 0	2.63 26	2.63

GG-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way 20 MPH, 4 Cycles/Hr	10.08 CY	COEID	25.00	0.04 0	1.06 11	0.92 9	0.00 0	0.00 0	1.97 20	1.97
GG-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	10.08 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 4,914	487.50 4,914	487.50
GG-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	9.16 CY	CODTE	30.00	0.04 0	1.19 11	1.46 13	0.00 0	0.00 0	2.65 24	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	3.41 CY	COEID	20.00	0.05 0	1.32 4	1.15 4	3.77 13	0.00 0	6.24 21	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	3.41 CY	CODTE	30.00	0.04 0	1.19 4	1.46 5	0.00 0	0.00 0	2.65 9	2.65
On-site Incineration	9.00 CY			5	114	52	44	4,954	5,163	573.70
SOLIDS PREPARATION AND HANDLING				5	114	52	44	4,954	5,163	
INCINERATION				5	114	52	44	4,954	5,163	
THERMAL TREATMENT				5	114	52	44	4,954	5,163	
1262 Transformer Pad				15	613	163	479	5,984	7,239	

HH-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HH. 1262 Solvents Tanks (4)											
Waste Site: 1262 Solvent Tanks (4), Last contained Carbon Tetrachloride,											
Site Considerations:											
Soil Sampling, Evaluate Existing Groundwater Data.											
Tank D-25, 20 gal											
Tank D-26, 100 gal											
Tanks D-32, 2 @ 1,125 gal											
Potential Remedial Activity:											
Remove USTs, Ship Soil to TSDF (40 CY given)											
HH-02. MONITOR, SAMPLE, TEST, ANALYSIS											
HH-02 06. SAMPLING SOIL, SED & SOLID WASTE											
HH-02 06 01. SURFACE SOIL											
HH-02 06 01 02. Confirmatory Sampling & Analyses											
Confirmatory Sampling & Analyze soil. Analyses cost below.											
USR AA <01954 76 > 8240, VOA - volatile organics, S	8.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 1,640	205.00 1,640	205.00
USR AA <01954 76 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Confirmatory Sampling & Analyses					0	480	0	0	1,640	2,120	
SURFACE SOIL					0	480	0	0	1,640	2,120	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	0	1,640	2,120	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	0	1,640	2,120	

HH-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HH-10. TANKS/MISC DEMOLITION & REMOVAL											
HH-10 02. TANK REMOVAL											
HH-10 02 01. UST Tank Excavation & Removal There are four (4) solvent tanks of various volume (20 gal - 1,125 gal). Use a tank excavation volume of 1,500 gal, assume made from steel.											
L USR AA <02220 0000 > Excavate soil around UST					0.08	2.02	1.68	0.00	0.00	3.69	
Estimate average excavation of 50 CY, the tank taking up 10 CY	200.00	CY	XXQMV	25.00	16	403	335	0	0	738	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk					2.00	50.42	41.89	0.00	250.00	342.31	
for disposal by Contractor. Allow 2 Hrs average each tank. Allow $500/ea tank for disposal	8.00	HR	XXQMV	1.00	16	403	335	0	2,000	2,738	342.31
UST Tank Excavation & Removal	4.00	EA			32	807	670	0	2,000	3,477	869.24
HH-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow two (3) days for removal of four tanks.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	12.00	EA	N/A	0.00	0	0	138	0	0	138	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	12.00	EA	N/A	0.00	0	0	0	91	0	91	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	12.00	PR	N/A	0.00	0	0	28	0	0	28	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying					0.00	0.00	0.00	19.94	0.00	19.94	
Respirators	12.00	EA	N/A	0.00	0	0	0	239	0	239	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi,					10.00	234.30	1.45	34.83	0.00	270.58	
4.2 gpm, 11 HP (Daily cost) For equipment decon.	3.00	DAY	ULABA	0.13	30	703	4	104	0	812	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall					0.00	0.00	0.00	26.95	0.00	26.95	
Fans (Monthly Rental)	3.00	DAY	N/A	0.00	0	0	0	81	0	81	26.95
HTW AA <01951 5723 > Cartridges, Respirator					0.00	0.00	0.00	25.87	0.00	25.87	
	24.00	EA	N/A	0.00	0	0	0	621	0	621	25.87
USR AA <01951 5805 > Disposal Allowance.					0.00	0.00	0.00	0.00	100.00	100.00	
Allow $100/day for disposal of personnel protection items and	3.00	DAY	N/A	0.00	0	0	0	0	300	300	100.00

HH-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
equipment/vehicle decon water.									
PPEquip, Modified Class D	3.00 DAY		30	703	170	1,136	300	2,309	769.66
HH-10 02 05. Site Re-grading Allow for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	1.00 DAY XXQNA	0.13	14	365	127	0	0	492	492.13
Site Re-grading	1.00 DAY		14	365	127	0	0	492	492.13
TANK REMOVAL			76	1,875	967	1,136	2,300	6,278	
TANKS/MISC DEMOLITION & REMOVAL			76	1,875	967	1,136	2,300	6,278	

HH-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HH-14. THERMAL TREATMENT											
HH-14 01. INCINERATION											
HH-14 01 01. SOLIDS PREPARATION AND HANDLING											
HH-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
HH-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.67	EA	N/A	0.00	0.00 0	0.00 0	11.50 31	0.00 0	0.00 0	11.50 31	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.67	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 20	0.00 0	7.55 20	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.67	PR	N/A	0.00	0.00 0	0.00 0	2.30 6	0.00 0	0.00 0	2.30 6	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.67	DAY	ULABA	0.13	10.00 7	234.30 156	1.45 1	34.83 23	0.00 0	270.58 180	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.67	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 18	0.00 0	26.95 18	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.67	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 67	100.00 67	100.00
HH-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	134.00	SY	ULABC	555.56	0.01 1	0.15 20	0.00 0	0.27 36	0.50 67	0.92 123	0.92
HH-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	44.80	CY	CODEG	20.00	0.08 3	2.03 91	0.60 27	0.00 0	0.00 0	2.63 118	2.63

HH-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way					0.04	1.06	0.92	0.00	0.00	1.97	
20 MPH, 4 Cycles/Hr	44.80	CY	COEID	25.00	2	47	41	0	0	88	1.97
HH-14 01 01 01 02B. On-site Incineration											
On-site Incineration:											
processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation											
cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, &											
operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton	44.80	LCY		0.00	0	0	0	0	21,840	21,840	487.50
Processing Rate: 5 Tons/Hr											
1 LCY = 2,940 LB = 1.5 Ton											
5T/H/1.5T/LCYx24H/D= 80.5 LCY/D											
and $325/Ton == $487.50/LCY											
HH-14 01 01 01 02C. Disposal, On-site											
Assume clean soil spread close to incinerator site. Soil is then covered											
with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	40.73	CY	CODTE	30.00	2	48	59	0	0	108	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	15.15	CY	COEID	20.00	1	20	17	57	0	95	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	15.15	CY	CODTE	30.00	1	18	22	0	0	40	2.65
On-site Incineration	40.00	CY			16	400	205	155	21,974	22,733	568.33
SOLIDS PREPARATION AND HANDLING					16	400	205	155	21,974	22,733	
INCINERATION					16	400	205	155	21,974	22,733	
THERMAL TREATMENT					16	400	205	155	21,974	22,733	
1262 Solvents Tanks (4)					92	2,755	1,172	1,291	25,914	31,131	

II-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

II. 1226 Suspect Waste Oil Disposal
Waste Site: 1226 Suspect Waste Oil Disposal Area

Site Considerations:
50 x 50 x 3

Potential Remedial Activity:
Take soil samples, Remove waste (275 CY to TSDF)
II-02. MONITOR, SAMPLE, TEST, ANALYSIS

II-02 06. SAMPLING SOIL, SED & SOLID WASTE

II-02 06 01. SURFACE SOIL

II-02 06 01 02. Confirmatory Samples & Analyses
Confirmatory sample & analyses. See detail for analysis cost.

USR AA <01954 76	> TPH, In-field test	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	161.70 323	0.00 0	161.70 323	161.70
USR AA <01954 76	> PCB, In-field test	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	183.26 367	0.00 0	183.26 367	183.26
USR AA <01954 76	> 8080, PCB - soil	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 190	95.00 190	95.00
USR AA <01954 76	> 8015, TRPH - total recoverable petroleum hydrocarbons - mods	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 270	135.00 270	135.00
USR AA <01954 76	> Sample Labor - 2 men	16.00 HR N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
	Confirmatory Samples & Analyses			0	480	0	690	460	1,630	
	SURFACE SOIL			0	480	0	690	460	1,630	
	SAMPLING SOIL, SED & SOLID WASTE			0	480	0	690	460	1,630	
	MONITOR, SAMPLE, TEST, ANALYSIS			0	480	0	690	460	1,630	

II-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
II-08. SOLIDS COLLECTION & CONTAINMENT									
II-08 01. EXCAVATION									
II-08 01 01. Excav/Load Contaminated Soils Quantity of 5 CY of solid wastes given by Env Engr.									
L USR AA <02220 0000 > Excavate/load solid waste			0.20	5.04	4.19	0.00	0.00	9.23	
Quantity of 250 CY given by Env Engr. Use 1.1 swell factor.	5.50 CY XXQMV	10.00	1	28	23	0	0	51	9.23
Excav/Load Contaminated Soils	5.00 CY		1	28	23	0	0	51	10.15
II-08 01 02. Transport Cont. Soils, Arlington Transport solid waste to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.									
USR AA <02220 0000 > Transport soil to Arlington, OR			0.00	0.00	0.00	0.00	400.00	400.00	
Assume this 5 CY will be combined with another truck load.	1.00 TRK	0.00	0	0	0	0	400	400	400.00
USR AA <02220 0000 > Disposal of waste to landfill			0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee.	8.53 TON	0.00	0	0	0	0	1,142	1,142	134.00
USR AA <02220 0000 > Oregon state environmental tax			0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax. 55 gal = 8.5 CF x 10 ea/27 CY/CF x 1.55 Ton/CY == 5 Ton.	8.53 TON	0.00	0	0	0	0	256	256	30.00
USR AA <02220 0000 > Soil profile fee			0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00 EA	0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	5.00 CY		0	0	0	0	2,098	2,098	419.62
II-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)			0.00	0.00	11.50	0.00	0.00	11.50	
	4.00 EA N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek			0.00	0.00	0.00	7.55	0.00	7.55	
	4.00 EA N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves			0.00	0.00	2.30	0.00	0.00	2.30	
	4.00 PR N/A	0.00	0	0	9	0	0	9	2.30

II-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 80	0.00 0	19.94 80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	1.00 DAY ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
HTW AA <01951 5723 > Cartridges, Respirator	8.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 207	0.00 0	25.87 207	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
II-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.25 DAY XXQNA	0.13	14.00 4	365.22 91	126.91 32	0.00 0	0.00 0	492.13 123	492.13
Site Re-grading			4	91	32	0	0	123	
EXCAVATION			15	353	111	379	2,198	3,042	
SOLIDS COLLECTION & CONTAINMENT			15	353	111	379	2,198	3,042	

II-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
II-14. THERMAL TREATMENT											
II-14 01. INCINERATION											
II-14 01 01. SOLIDS PREPARATION AND HANDLING											
II-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
II-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	7.33	EA	N/A	0.00	0.00 0	0.00 0	11.50 84	0.00 0	0.00 0	11.50 84	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	7.33	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 55	0.00 0	7.55 55	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	7.33	PR	N/A	0.00	0.00 0	0.00 0	2.30 17	0.00 0	0.00 0	2.30 17	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	1.83	DAY	ULABA	0.13	10.00 18	234.30 430	1.45 3	34.83 64	0.00 0	270.58 496	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.83	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 49	0.00 0	26.95 49	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.83	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 183	100.00 183	100.00
II-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	921.25	SY	ULABC	555.56	0.01 6	0.15 136	0.00 1	0.27 248	0.50 461	0.92 846	0.92
II-14 01 01 01 02A. Excavate, haul to Incinerator Assume incinerator within a mile of site. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	308.00	CY	CODEG	20.00	0.08 23	2.03 625	0.60 184	0.00 0	0.00 0	2.63 809	2.63

II-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <02225 3104 > Haul, 12 CY Truck, 1-Mi one-way				0.04	1.06	0.92	0.00	0.00	1.97	
20 MPH, 4 Cycles/Hr	308.00 CY	COEID	25.00	12	325	282	0	0	607	1.97
II-14 01 01 01 02B. On-site Incineration										
On-site Incineration:										
processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation										
cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, &										
operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils				0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton	308.00 LCY		0.00	0	0	0	0	150,150	150,150	487.50
Processing Rate: 5 Tons/Hr										
1 LCY = 2,940 LB = 1.5 Ton										
5T/H/1.5T/LCYx24H/D= 80.5 LCY/D										
and $325/Ton == $487.50/LCY										
II-14 01 01 01 02C. Disposal, On-site										
Assume clean soil spread close to incinerator site. Soil is then covered										
with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	280.00 CY	CODTE	30.00	12	332	408	0	0	741	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way				0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	104.17 CY	COEID	20.00	5	137	119	393	0	650	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	104.17 CY	CODTE	30.00	4	124	152	0	0	276	2.65
On-site Incineration	275.00 CY			81	2,109	1,250	810	150,794	154,963	563.50
SOLIDS PREPARATION AND HANDLING				81	2,109	1,250	810	150,794	154,963	
INCINERATION				81	2,109	1,250	810	150,794	154,963	
THERMAL TREATMENT				81	2,109	1,250	810	150,794	154,963	
1226 Suspect Waste Oil Disposal				95	2,942	1,362	1,879	153,452	159,634	

JJ-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
JJ. JA Jones Steam Plant Drain Pad											
Waste Site: JA Jones steam plant drain pad											
Site Considerations:											
45 x 80 concrete pad											
Potential Remedial Activity:											
Take soil samples, Remove waste											
JJ-02. MONITOR, SAMPLE, TEST, ANALYSIS											
JJ-02 06. SAMPLING SOIL, SED & SOLID WASTE											
JJ-02 06 01. SURFACE SOIL											
JJ-02 06 01 02. Confirmatory Samples & Analyses											
Confirmatory sample & analyses. See detail for analysis cost.											
USR AA <01954 76 > pH					0.00	0.00	0.00	0.00	15.00	15.00	
	4.00	EA	N/A	0.00	0	0	0	0	60	60	15.00
USR AA <01954 76 > TPH, In-field test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 76 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	8.00	HR	N/A	0.00	0	240	0	0	0	240	30.00
Confirmatory Samples & Analyses					0	240	0	162	60	462	
SURFACE SOIL					0	240	0	162	60	462	
SAMPLING SOIL, SED & SOLID WASTE					0	240	0	162	60	462	
JJ-02 11. GEOTECHNICAL TESTING											
JJ-02 11 01. Geophysical Survey											
Use Geophysical Survey (Ground penetrating radar) to try to determine what is under pad, as it has some questionable areas. Cost based on quote from Geo Recon, Seattle, for doing several sites at once.											
Geophysical Survey	1.00	EA			0	0	0	0	3,500	3,500	3500.00
GEOTECHNICAL TESTING					0	0	0	0	3,500	3,500	
MONITOR, SAMPLE, TEST, ANALYSIS					0	240	0	162	3,560	3,962	
JA Jones Steam Plant Drain Pad					0	240	0	162	3,560	3,962	
HANFORD: REMEDIATION					406	47,589	14,511	6,795	703,084	771,979	

SRC	ITEM ID	DESCRIPTION	NO.	UOM	RATE	**** LABOR **** HOURS	COST	**** EQUIP **** HOURS	COST	TOTAL COST
	CODEG	1 B-eqoprmed + 1 Backhoe Loader, 55 Hp			PROD = 100%				CREW HOURS =	23
MIL	B-LABORER L	Laborer (Semi-Skilled)	0.50	HR	23.33	0.50	11.67			11.67
MIL	B-EQOPRMEDF	Eq Oper, Medium	1.00	HR	28.89	1.00	28.89			28.89
MIL	L50CS002 E	LDR,W/BH,WH,1.0CY FE BKT/24"DIP	1.00	HR	11.95			1.00	11.95	11.95
	TOTAL					1.50	40.56	1.00	11.95	52.50
	CODTE	1 B-eqoprmed + 1 Dozer, Cat D-6H, 165 Hp			PROD = 100%				CREW HOURS =	19
MIL	B-EQOPRMEDF	Eq Oper, Medium	0.25	HR	28.89	0.25	7.22			7.22
MIL	B-EQOPRMEDL	Eq Oper, Medium	1.00	HR	28.39	1.00	28.39			28.39
MIL	T10CA010 E	BLADE, ANGLE, HYDR, FOR D6	1.00	HR	4.05			1.00	4.05	4.05
MIL	T15CA010 E	DOZER,CWLR,D-6H,PS,(ADD BLADE)	1.00	HR	39.69			1.00	39.69	39.69
	TOTAL					1.25	35.61	2.00	43.74	79.35
	COEID	1 B-trkdvrhv + 1 Dump Truck, 12 Cy			PROD = 100%				CREW HOURS =	26
MIL	B-TRKDVRHVL	Truck Drivers, Heavy	1.00	HR	26.39	1.00	26.39			26.39
MIL	T40XX010 E	TRUCK OPT,REAR DUMP BODY, 12 CY	1.00	HR	2.69			1.00	2.69	2.69
MIL	T50GM016 E	TRK, HWY, 3 AXLE, 41000 GVW, 6X	1.00	HR	20.21			1.00	20.21	20.21
	TOTAL					1.00	26.39	2.00	22.90	49.29
	ULABA	1 B-laborer + Small Tools			PROD = 100%				CREW HOURS =	114
MIL	B-LABORER F	Laborer (Semi-Skilled)	0.25	HR	23.83	0.25	5.96			5.96
MIL	B-LABORER L	Laborer (Semi-Skilled)	1.00	HR	23.33	1.00	23.33			23.33
MIL	XMIXX020 E	Small Tools	0.13	HR	1.39			0.13	0.18	0.18
	TOTAL					1.25	29.29	0.13	0.18	29.47
	ULABC	3 B-laborer + Small Tools			PROD = 100%				CREW HOURS =	2
MIL	B-LABORER L	Laborer (Semi-Skilled)	3.00	HR	23.33	3.00	69.99			69.99
MIL	B-LABORER F	Laborer (Semi-Skilled)	0.50	HR	23.83	0.50	11.92			11.92
MIL	XMIXX020 E	Small Tools	0.40	HR	1.39			0.40	0.56	0.56
	TOTAL					3.50	81.91	0.40	0.56	82.46
	XXQMG	1 X-eqoprmed + 1 Front End Ldr, 5-1/4 Cy, Wheel			PROD = 100%				CREW HOURS =	6
MIL	L40CA007 E	LDR,FE,WH, 5-1/4 CY ARTIC,980-C	1.00	HR	58.23			1.00	58.23	58.23
MIL	X-EQOPRMEDL	Outside Equip. Op. Medium	1.00	HR	27.09	1.00	27.09			27.09
	TOTAL					1.00	27.09	1.00	58.23	85.32
	XXQMV	1 X-eqoprmed + 1 Hydr. Excavator, 1-1/2 Cy, Cwlr			PROD = 100%				CREW HOURS =	51
MIL	H25JD009 E	HYD EXCAV,CRWLR,1.5 CY BKT	1.00	HR	41.74			1.00	41.74	41.74
MIL	XMIXX020 E	Small Tools	0.11	HR	1.39			0.11	0.15	0.15
MIL	X-LABORER L	Outside Laborer	1.00	HR	23.33	1.00	23.33			23.33
MIL	X-EQOPRMEDL	Outside Equip. Op. Medium	1.00	HR	27.09	1.00	27.09			27.09
	TOTAL					2.00	50.42	1.11	41.89	92.31

Tue 23 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSI03R: HANFORD: REMEDIATION - 1.4.10.1.1.23.03.2.2
1100-EM-3, Waste Site Cost Est., REVISED f/ OSI
** CREW BACKUP **

TIME 17:35:43

BACKUP PAGE 2

SRC	ITEM ID	DESCRIPTION	NO.	UOM	RATE	**** LABOR **** HOURS	COST	**** EQUIP **** HOURS	COST	TOTAL COST
	XXQNA	1 X-eqoprmed + 1 Dozer, Cat D-3C, 65 Hp				PROD = 100%			CREW HOURS =	36
MIL	T10CA001	E BLADE,POWER ANGLE TILT,FOR D3	1.00	HR	1.92			1.00	1.92	1.92
MIL	T15CA003	E DOZER,CWLR,D-3C,PS,(ADD BLADE)	1.00	HR	13.94			1.00	13.94	13.94
MIL	X-LABORER	L Outside Laborer	0.50	HR	23.33	0.50	11.67			11.67
MIL	X-EQOPRMEDL	Outside Equip. Op. Medium	1.00	HR	27.09	1.00	27.09			27.09
MIL	X-EQOPRMEDF	Outside Equip. Op. Medium	0.25	HR	27.59	0.25	6.90			6.90
	TOTAL					1.75	45.65	2.00	15.86	61.52

Tue 23 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSI03R: HANFORD: REMEDIATION - 1.4.10.1.1.23.03.2.2
1100-EM-3, Waste Site Cost Est., REVISED f/ OSI
** LABOR BACKUP **

TIME 17:35:43

SRC	LABOR ID	DESCRIPTION	BASE	OVERTM	TXS/INS	FRNG	TRVL	RATE	UOM	UPDATE	**** TOTAL **** DEFAULT	HOURS
MIL	B-EQOPRMED	Equipment Operator, Medium	28.39	0.0%	0.0%	0.00	0.00	28.39	HR	10/15/92	26.13	47
MIL	B-LABORER	Laborer/Helper	23.33	0.0%	0.0%	0.00	0.00	23.33	HR	10/15/92	22.36	163
MIL	B-TRKDVRHV	Truck Drivers, Heavy	26.39	0.0%	0.0%	0.00	0.00	26.39	HR	10/15/92	25.61	26
MIL	X-EQOPRMED	Outside Equipment Oper. Medium	27.09	0.0%	0.0%	0.00	0.00	27.09	HR	10/15/92	25.84	102
MIL	X-LABORER	Outside Laborer	23.33	0.0%	0.0%	0.00	0.00	23.33	HR	10/15/92	22.36	69

SRC	EQUIP ID	DESCRIPTION	DEPR	CAPT	FUEL	FOG	EQ REP	TR WR	TR REP	TOTAL	UOM	** TOTAL ** HOURS
MIL	H25JD009	HYD EXCAV,CRWLR,1.5 CY BKT	14.34	5.11	4.87	1.8	15.56			41.74	HR	51
MIL	L40CA007	LDR,FE,WH, 5-1/4 CY ARTIC,980-C	17.46	7.15	7.97	2.3	15.74	6.54	0.98	58.23	HR	6
MIL	L50CS002	LDR,W/BH,WH,1.0CY FE BKT/24"DIP	3.42	1.42	1.86	0.6	4.04	0.53	0.08	11.95	HR	23
MIL	T10CA001	BLADE,POWER ANGLE TILT,FOR D3	0.75	0.27		0.0	0.82			1.92	HR	36
MIL	T10CA010	BLADE, ANGLE, HYDR, FOR D6	1.62	0.58		0.0	1.77			4.05	HR	19
MIL	T15CA003	DOZER,CWLR,D-3C,PS,(ADD BLADE)	3.51	1.39	2.14	0.7	6.14			13.94	HR	36
MIL	T15CA010	DOZER,CWLR,D-6H,PS,(ADD BLADE)	10.34	4.09	5.28	1.9	18.09			39.69	HR	19
MIL	T40XX010	TRUCK OPT,REAR DUMP BODY, 12 CY	1.15	0.34		0.0	1.11			2.69	HR	26
MIL	T50GN016	TRK, HWY, 3 AXLE, 41000 GVW, 6X4	4.17	1.32	7.46	2.0	3.69	1.29	0.19	20.21	HR	26
MIL	XMIXX020	Small Tools	0.46	0.17	0.13	0.0	0.57			1.39	HR	21

** PROJECT SETTINGS **

ESTIMATE TYPE : A-Crews with Auto Reprice

SALES TAX : 7.80%

DATE OF ESCALATION SCHEDULE : 10/01/93

PROJECT DIRECT COST COLUMNS

Col Type	H	L	E	M	U
Rep Width	8	10	10	12	10
Title	MHRS	LABR	EQUIP	MAT	OTHER

PROJECT INDIRECT COST COLUMNS

Col Type	O	U	P	B	U
Rep Width	9	9	9	9	9
Title	FOOH	HOOH	PROF	BOND	B&O TAX

PROJECT OWNER COST COLUMNS

Col Type	U	U	X	X	X
Rep Width	12	12	0	0	0
Title	S & A	CONTG	(Unused)	(Unused)	(Unused)

PROJECT BREAKDOWN

PROJECT ID	Length	Trail Sep	Level Title	2nd View Order
Level 1 ID :	2	-	WastSite	0
Level 2 ID :	2		Feature	0
Level 3 ID :	2		SubFeat	0
Level 4 ID :	2		CostL1	0
Level 5 ID :	4		CostL2	0
Level 6 ID :	4		CostL3	0

Owner Cost Level : 1

** PROJECT SETTINGS **

2ND VIEW COLUMNS
Quantity Column Width : 10

Col Type	X	X	X	X	X
Rep Width	0	0	0	0	0
Title	(Unused)	(Unused)	(Unused)	(Unused)	(Unused)
Shadow	X	X	X	X	X

DETAIL REPORT FORMATTING

PAGE OPTIONS
Page Break Levels : 2
Table of Contents Levels : 3

		0	1	2	3	4	5	6	7
ROW OPTIONS	Print Titles at Levels :		Y	Y	Y	Y	Y	Y	
	Print Totals at Levels :		Y	Y	Y	Y	Y	N	
	Print Notes at Levels :	Y	Y	Y	Y	Y	Y	Y	Y
	Print Unit Cost Row :	Y							
	Print Page Footer :	N							
	Show Cost Codes :	Y							
COLUMNS OPTIONS	Print Crew Id :	Y							
	Crew Output :	Y							
	Unit Cost :	Y							
UPB TITLES	No. of Levels to Print :	0							
	Bracket Titles With :	- :							
	Include titles Notes :	Y							

** PROJECT SETTINGS **

OTHER REPORT FORMATTING

COLUMN TITLES FOR SUMMARY REPORTS

Column 1 FOOH : JOB OFFICE OVERHEAD
Column 2 HOOH : HOME OFFICE OVERHEAD
Column 3 PROF : PROFIT
Column 4 BOND : PERFORMANCE BOND
Column 5 B&O TAX : B & O AND OTHER TAXES

Column 1 S & A : S & A
Column 2 CONTG : CONTINGENCY
Column 3 (Unused) :
Column 4 (Unused) :
Column 5 (Unused) :

STANDARD COLUMN WIDTHS		SUMMARY FEATURES	
Quantity Columns :	10	Round Totals Column :	T-Tens
Total cost Columns :	12	Contingency Notes :	Yes
Unit Cost Columns :	12	Show Project Totals :	Yes

REPORT SELECTION

Project Settings : Y
Contractor Settings : Y Measurement Units : Original
Link Listing : N

	REPORT FORMAT TYPE			FOR LEVEL (S)
	Direct	Indirect	Owner	0 1 2 3 4 5 6
Detail :	Y			
Project :	N	Y	Y	Y Y N Y N N
Contractor :	N	N		N N N N N N N
Division :	N	N	N	Y N N N N N N
System :	N	N	N	Y N N N N N N
2nd View :	N			
Crew :	Y			Y N N N N N N
Labor :	Y			
Equipment :	Y			

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
Project Information Record							
0A MOBILIZATION/DEMOB & PREPWORK							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
0A-01 MOBILIZATION AND PREPATORY WORK							
0A-01 01 MOB OF EQUIPMENT & PERSONNEL							
0A-01 01 01 Mob of Equipment & Facilities							
	S & A	O					
	CONTINGENCY	P	20.00				
0A-01 03 SETUP/CONSTRUCT TEMP FACILITIES							
0A-01 03 01 TRAILERS AND BUILDINGS							
	S & A	O					
	CONTINGENCY	P	25.00				
0A-01 03 02 DECONTAMINATION FACILITIES							
0A-01 03 02 01 Personnel Decon Facilities							
	S & A	O					
	CONTINGENCY	P	25.00				
0A-01 03 02 02 Equip/Vehicle Decon Facilities							
	S & A	O					
	CONTINGENCY	P	25.00				
0A-21 DEMOBILIZATION							
0A-21 04 DEMOB OF EQUIPMENT & PERSONNEL							
0A-21 04 01 Demob Equipment/Facilities							
	S & A	O					
	CONTINGENCY	P	20.00				
0B COE QA/SAFETY MONITORING							
	S & A	P	20.00				
	CONTINGENCY	P	20.00				
0B-91 QA/Safety Monitoring							
0B-91 01 QA/Safety Monitoring							
	S & A	O					
	CONTINGENCY	O					
0C EM-03 Monitoring Wells							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
0C-02 MONITOR, SAMPLE, TEST, ANALYSIS							
0C-02 04 MONITORING WELLS							
0C-02 04 01 WELL DRILLING & CONSTRUCTION							
0C-02 04 01 01 4" Dia, Monitoring Well (70 LF)							
	S & A	O					
	CONTINGENCY	P	20.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
0C-02 05 SAMPLING S.W./GROUND WATER/L.W.							
0C-02 05 02 GROUND WATER Sampling							
	S & A	O					
	CONTINGENCY	P	20.00				
AA 1240 Suspect Spill Area							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AA-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AA-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AA-02 06 01 SURFACE SOIL							
AA-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				
AA-14 THERMAL TREATMENT							
AA-14 01 INCINERATION							
AA-14 01 01 SOLIDS PREPARATION AND HANDLING							
AA-14 01 01 01 On-site Incineration							
AA-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
AA-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
AA-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				
AA-14 01 01 01 02B On-site Incineration							
	S & A	O					
	CONTINGENCY	P	30.00				
AA-14 01 01 01 02C Disposal, On-site							
	S & A	O					
	CONTINGENCY	P	30.00				
BB 1240 French Drain							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
BB-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BB-02 06 SAMPLING SOIL, SED & SOLID WASTE							
BB-02 06 01 SURFACE SOIL							
BB-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
BB-14 THERMAL TREATMENT						
BB-14 01 INCINERATION						
BB-14 01 01 SOLIDS PREPARATION AND HANDLING						
BB-14 01 01 01 On-site Incineration						
BB-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
BB-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
BB-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
BB-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
BB-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
CC 1212/1227 Suspect Battery Acid						
S & A	P	20.00				
CONTINGENCY	P	0.00				
CC-02 MONITOR, SAMPLE, TEST, ANALYSIS						
CC-02 06 SAMPLING SOIL, SED & SOLID WASTE						
CC-02 06 01 SURFACE SOIL						
CC-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	20.00				
CC-08 SOLIDS COLLECTION & CONTAINMENT						
CC-08 01 EXCAVATION						
CC-08 01 01 Excav/Load Contaminated Soils						
S & A	O					
CONTINGENCY	P	40.00				
CC-08 01 02 Transport Cont. Soils, Arlington						
S & A	O					
CONTINGENCY	P	25.00				
CC-08 01 03 PPEquip, Modified Class D						
S & A	O					
CONTINGENCY	P	20.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
CC-08 01 04 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	25.00				
DD 1218 Service Station							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
DD-02 MONITOR, SAMPLE, TEST, ANALYSIS							
DD-02 06 SAMPLING SOIL, SED & SOLID WASTE							
DD-02 06 01 SURFACE SOIL							
DD-02 06 01 01 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				
DD-02 11 GEOTECHNICAL TESTING							
DD-02 11 01 Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
DD-10 TANKS/MISC DEMOLITION & REMOVAL							
DD-10 02 TANK REMOVAL							
DD-10 02 01 UST Tank Excavation & Removal							
	S & A	O					
	CONTINGENCY	P	25.00				
DD-10 02 04 PPEquip, Modified Class D							
	S & A	O					
	CONTINGENCY	P	20.00				
DD-10 02 05 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	25.00				
DD-14 THERMAL TREATMENT							
DD-14 01 INCINERATION							
DD-14 01 01 SOLIDS PREPARATION AND HANDLING							
DD-14 01 01 01 On-site Incineration							
DD-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
DD-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
DD-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
DD-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
DD-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				
EE 1208 Sandblast Area							
S & A	P		20.00				
CONTINGENCY	P		0.00				
EE-02 MONITOR, SAMPLE, TEST, ANALYSIS							
EE-02 06 SAMPLING SOIL, SED & SOLID WASTE							
EE-02 06 01 SURFACE SOIL							
EE-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		20.00				
EE-08 SOLIDS COLLECTION & CONTAINMENT							
EE-08 01 EXCAVATION							
EE-08 01 01 Excav/Load Contaminated Soils							
S & A	O						
CONTINGENCY	P		30.00				
EE-08 01 02 Transport Cont. Soils, Arlington							
S & A	O						
CONTINGENCY	P		25.00				
EE-08 01 03 PPEquip, Modified Class D							
S & A	O						
CONTINGENCY	P		20.00				
EE-08 01 04 Site Re-grading							
S & A	O						
CONTINGENCY	P		25.00				
FF JA Jones Oil Storage Tanks (2)							
S & A	P		20.00				
CONTINGENCY	P		0.00				
FF-02 MONITOR, SAMPLE, TEST, ANALYSIS							
FF-02 06 SAMPLING SOIL, SED & SOLID WASTE							
FF-02 06 01 SURFACE SOIL							
FF-02 06 01 01 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		20.00				
FF-02 11 GEOTECHNICAL TESTING							

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
FF-02 11 01 Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
FF-10 TANKS/MISC DEMOLITION & REMOVAL							
FF-10 02 TANK REMOVAL							
FF-10 02 01 UST Tank Excavation & Removal							
	S & A.	O					
	CONTINGENCY	P	25.00				
FF-10 02 04 PPEquip, Modified Class D							
	S & A	O					
	CONTINGENCY	P	20.00				
FF-10 02 05 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	25.00				
FF-14 THERMAL TREATMENT							
FF-14 01 INCINERATION							
FF-14 01 01 SOLIDS PREPARATION AND HANDLING							
FF-14 01 01 01 On-site Incineration							
FF-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
FF-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
FF-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				
FF-14 01 01 01 02B On-site Incineration							
	S & A	O					
	CONTINGENCY	P	30.00				
FF-14 01 01 01 02C Disposal, On-site							
	S & A	O					
	CONTINGENCY	P	30.00				
GG 1262 Transformer Pad							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
GG-02 MONITOR, SAMPLE, TEST, ANALYSIS							
GG-02 06 SAMPLING SOIL, SED & SOLID WASTE							
GG-02 06 01 SURFACE SOIL							

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
GG-02 06 01 01 PCB Soil Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				
GG-08 SOLIDS COLLECTION & CONTAINMENT							
GG-08 01 EXCAVATION							
GG-08 01 01 Excav/Load Cont. Soil & Conc Pad							
	S & A	O					
	CONTINGENCY	P	30.00				
GG-08 01 02 Transport Cont. Soils, Arlington							
	S & A	O					
	CONTINGENCY	P	25.00				
GG-08 01 03 PPEquip, Modified Class D							
	S & A	O					
	CONTINGENCY	P	20.00				
GG-08 01 04 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	25.00				
GG-14 THERMAL TREATMENT							
GG-14 01 INCINERATION							
GG-14 01 01 SOLIDS PREPARATION AND HANDLING							
GG-14 01 01 01 On-site Incineration							
GG-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
GG-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
GG-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				
GG-14 01 01 01 02B On-site Incineration							
	S & A	O					
	CONTINGENCY	P	30.00				
GG-14 01 01 01 02C Disposal, On-site							
	S & A	O					
	CONTINGENCY	P	30.00				
HH 1262 Solvents Tanks (4)							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
HH-02 MONITOR, SAMPLE, TEST, ANALYSIS							
HH-02 06 SAMPLING SOIL, SED & SOLID WASTE							
HH-02 06 01 SURFACE SOIL							
HH-02 06 01 02 Confirmatory Sampling & Analyses							
S & A	O						
CONTINGENCY	P		20.00				
HH-10 TANKS/MISC DEMOLITION & REMOVAL							
HH-10 02 TANK REMOVAL							
HH-10 02 01 UST Tank Excavation & Removal							
S & A	O						
CONTINGENCY	P		25.00				
HH-10 02 04 PPEquip, Modified Class D							
S & A	O						
CONTINGENCY	P		20.00				
HH-10 02 05 Site Re-grading							
S & A	O						
CONTINGENCY	P		25.00				
HH-14 THERMAL TREATMENT							
HH-14 01 INCINERATION							
HH-14 01 01 SOLIDS PREPARATION AND HANDLING							
HH-14 01 01 01 On-site Incineration							
HH-14 01 01 01 01 PPEquip, Class D							
S & A	O						
CONTINGENCY	P		25.00				
HH-14 01 01 01 03 Plastic Cover, Excavation Area							
S & A	O						
CONTINGENCY	O						
HH-14 01 01 01 02A Excavate, haul to Incinerator							
S & A	O						
CONTINGENCY	P		30.00				
HH-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
HH-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				
II 1226 Suspect Waste Oil Disposal							
S & A	P		20.00				
CONTINGENCY	P		0.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
II-02 MONITOR, SAMPLE, TEST, ANALYSIS							
II-02 06 SAMPLING SOIL, SED & SOLID WASTE							
II-02 06 01 SURFACE SOIL							
II-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		20.00				
II-08 SOLIDS COLLECTION & CONTAINMENT							
II-08 01 EXCAVATION							
II-08 01 01 Excav/Load Contaminated Soils							
S & A	O						
CONTINGENCY	P		40.00				
II-08 01 02 Transport Cont. Soils, Arlington							
S & A	O						
CONTINGENCY	P		25.00				
II-08 01 03 PPEquip, Modified Class D							
S & A	O						
CONTINGENCY	P		20.00				
II-08 01 04 Site Re-grading							
S & A	O						
CONTINGENCY	P		25.00				
II-14 THERMAL TREATMENT							
II-14 01 INCINERATION							
II-14 01 01 SOLIDS PREPARATION AND HANDLING							
II-14 01 01 01 On-site Incineration							
II-14 01 01 01 01 PPEquip, Class D							
S & A	O						
CONTINGENCY	P		25.00				
II-14 01 01 01 03 Plastic Cover, Excavation Area							
S & A	O						
CONTINGENCY	O						
II-14 01 01 01 02A Excavate, haul to Incinerator							
S & A	O						
CONTINGENCY	P		30.00				
II-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
II-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
JJ JA Jones Steam Plant Drain Pad							
S & A	P		20.00				
CONTINGENCY	P		0.00				
JJ-02 MONITOR, SAMPLE, TEST, ANALYSIS							
JJ-02 06 SAMPLING SOIL, SED & SOLID WASTE							
JJ-02 06 01 SURFACE SOIL							
JJ-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		20.00				
JJ-02 11 GEOTECHNICAL TESTING							
JJ-02 11 01 Geophysical Survey							
S & A	O						
CONTINGENCY	P		25.00				

** CONTRACTOR SETTINGS **

		AMOUNT	PCT	PCT S	RISK	DIFF	SIZE	PERIOD	INVEST	ASSIST	SUBCON
AA REMEDIAL GENERAL CONTRACTOR											
JOB OFFICE OVERHEAD	P		15.00								
HOME OFFICE OVERHEAD	P		5.00								
PROFIT	P		8.00								
PERFORMANCE BOND	C			(Class: B)							
B & O AND OTHER TAXES	P		1.00								
GS Geophysical Survey Subcontractor											
JOB OFFICE OVERHEAD	P		0.00								
HOME OFFICE OVERHEAD	P		0.00								
PROFIT	P		0.00								
PERFORMANCE BOND	P		0.00								
B & O AND OTHER TAXES	P		0.00								
SG Soil Gas Sampling Subcontractor											
JOB OFFICE OVERHEAD	P		0.00								
HOME OFFICE OVERHEAD	P		0.00								
PROFIT	P		0.00								
PERFORMANCE BOND	P		0.00								
B & O AND OTHER TAXES	P		0.00								

1100-IU-1 OPERABLE UNIT ONSITE INCINERATION ALTERNATIVE COST ESTIMATE

9 3 1 0 9 3 4 1 8 6 1

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9 3 1 2 9 3 4 1 8 5 2

HANFORD: REMEDIATION
1.4.10.1.1.23.04.2.2
1100-IU-1 OPERABLE UNIT
WASTE SITE COST ESTIMATES
Revised Quant./Sites w/ OSI

Designed By:
Estimated By:

Prepared By: USACE/CENPW COST ENGR BRANCH

Date: 03/24/93
Est Construction Time: 80 Days

M C A C E S G O L D E D I T I O N
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Release 5.20J

HANFORD: 1.4.10.1.1.23.04.2.2 1100-IU-1 Cost Estimate Considerations

This is the structure for the Subproject and Operable Unit remediation cost estimates. The Work Breakdown Structure (WBS) is based on the DOE-HQ WBS and a site specific remediation WBS being developed for Hanford.

"1.4.10.1.1" is DOE, Richland Operations, Hanford Environmental Restoration, Remedial Action.
".23" is the Subproject (ie. 1100-EM/IU)
".04" is the Operable Unit
".2" is Remediation
".2" is Remedial Action

In this MCACES estimate project breakdown, the first level is the individual Waste Site. The numbers for the next two to three levels (2nd thru 4th) are from the Hanford Remedial Action WBS. The fourth thru sixth levels are user defined, being either a Title or cost detail.

The Price Level for the estimate dollars is FY 93. S & A is estimated at 20%, and consists of NPW's Project Management @ 5%, Construction Management @ 10%, and Engineering During Construction @ 5%. See Contingency Notes (Title Page 3) for explanation of Contingency percentages. Contingency was applied at Level 1 or Level 4/5 in the estimate, to allow use of different percentages for the various types of work (see Settings for which percentage was applied). See Detail Page 1 for explanation of Contractor Indirect percentages used. E&D and Escalation will be added by the NPW-Hanford Project Manager.

List of Waste Sites: 1100-IU-1

Radar Berm & Pads
H-52-C Surface Gas Tank Storage Area (2 - 475 Gal tanks)
Control Center disposal pits (4)
Building 6652-C (Abandoned USTs, 5 - 1,000 gal fuel oil)
Pumphouse Disposal Slope
Pumphouse Latrine 275 Gal Fuel Oil Tank (tank removed)
Pumphouse Latrine 1,500 Gal Fuel Oil Storage Tank (tank removed)
6652-C SSL, Active Septic System
6652-C SSI, Inactive Septic Tank
6652-G ALE, Field Storage Building Septic Tank
Mound Site NW of Building 6652-G
6652-I ALE, Headquarters Septic Tank & Drainfield (6,000 gal)
Abandoned USTs:
  6652-H, 275 gal, oil
  6652-H, 2,000 gal, oil
  6652-I, 2,000 gal, fuel oil
  6652-J, 2,000 gal, fuel oil
  6652-HI, unknown vol, fuel oil
  Generator Building, UST 3,000 gal, fuel oil
6652-G, UST, 2,000 gal, fuel oil
Missile Bunker sump (underground facilities)
Missile Bunker Drainfield, Active
Main Entrance Stained Soil

Missile Bunker Discharge Ditch
JP4 Fuel Pad
NIKE BASE Landfill
Missile Bunker Landfill
Missile Refueling Area Berm
Acid Neutralization Pit
Missile Refueling, JP-4 Fueling Area
Missile Maintenance & Assembly Area (M.M & A.A.), Inactive Septic System
M.M. & A.A., 275 gal Fuel Oil Tank
M.M. & A.A., Acid Storage Shed
M.M. & A.A., Paint Shed
Flammable Storage Block Shed
M.M. & A.A., Dry Well
Generator Building
"Horseshoe" Site
H-52-L, Surface Gas Tank Area (2 - 475 gal tanks)
Elevator Doors

1100-IU-01 - Characterization Well

The following IU-1 sites do not need or won't be remediated, so NO cost has been estimated:

Potential Landfill at Control Center, top of Rattlesnake Mtn
6652-C UST, at Control Center (managed by PNL)
6652-P UST (unknown volume, last contained diesel)
6652-L UST (unknown volume, last contained diesel)
Missile Maintenance & Assembly Area, Transformer Pad
Anti-Aircraft Artillery
Homestead Landfills
Homestead Cisterns

THIS estimate is a revision of the January estimate, based on revised sites and quantities supplied by NPW-EN-EE, 3/9/93, AND revised for using On-site Incineration (OSI) for most of the contaminated soil remediation. Some contaminated wastes are still trucked to the TSDF, the remaining burnable materials will be trucked to the OSI holding area. The OSI Mob/Demob & Setup costs are covered in the EM-2 Estimate.

1. Contingency of 15%-25% is normal for this level of detail, percentage used based on a high to low confidence in numbers. Use as overall contingency, applied at Level 1, or at lower levels as needed to better define variable risks/difficulties.

2. Contingency is based on uncertainty of the amount of time required to do the work represented in the estimate, etc.

3. Contingency is based on the uncertainty of the quantities presented.

4. Contingency based on the unit costs obtained by Vendor and therefore may be different by the time work will actually be accomplished.

SUMMARY REPORTS — SUMMARY PAGE

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PROJECT OWNER SUMMARY - LEVEL 2.....2
PROJECT INDIRECT SUMMARY - LEVEL 1.....8
PROJECT INDIRECT SUMMARY - LEVEL 2.....9

DETAILED ESTIMATE — DETAIL PAGE

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21. DEMOBILIZATION
04. DEMOB OF EQUIPMENT & PERSONNEL.....3
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Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** PROJECT OWNER SUMMARY - LEVEL 1 (Rounded to 1000's) **

TIME 11:50:38
SUMMARY PAGE 1

		QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
OA	MOBILIZATION/DEMOB & PREPWORK		18,000	4,000	4,000	26,000		
OB	COE QA/SAFETY MONITORING		34,000	7,000	8,000	49,000		2
AA	Radar Berm & Pads		34,000	7,000	11,000	52,000		
AB	H-52-C Surface Gas Tank Storage		35,000	7,000	12,000	55,000		
AC	Control Center disposal pits (4)		10,000	2,000	3,000	15,000		
AD	BLDG 6652-C, Abandoned USTs (5)		95,000	19,000	32,000	147,000		
AE	Pumphouse Disposal Slope		24,000	5,000	8,000	37,000		
AF	Pumphouse Latine, 275 Gal tank		4,000	1,000	1,000	7,000		
AG	Pumphouse Latrine, 1500 Gal tank		5,000	1,000	2,000	7,000		
AH	6652-C SSL Active Septic System		24,000	5,000	8,000	36,000		
AI	6652-C SSI Inactive Septic Tank		493,000	99,000	175,000	766,000		
AJ	6652-G ALE F.S. Bldg Septic Tank		668,000	134,000	238,000	1,039,000		
AK	Mound Site NW of BLDG. 6652-G		19,000	4,000	7,000	30,000		
AL	6652-I ALE, HQTRs Septic Tank &		1,354,000	271,000	480,000	2,105,000		
AM	Abandoned UST, 6652-, 6 tanks		119,000	24,000	40,000	182,000		
AN	6652-G UST, 2,000 Gal fuel oil		21,000	4,000	7,000	32,000		
AO	Missile Bunker sump, undrgnd fac		4,000	1,000	1,000	6,000		
AP	Missile Bunker Drainfield Active		72,000	14,000	24,000	111,000		
AQ	Main Entrance Stained Soil		26,000	5,000	9,000	40,000		
AR	Missile Bunker Discharge Ditch		66,000	13,000	22,000	101,000		
AS	JP4 Fuel Pad		8,000	2,000	3,000	12,000		
AT	NIKE BASE LANDFILL		23,000	5,000	6,000	33,000		
AU	Missile Bunker Landfill		23,000	5,000	6,000	33,000		
AV	Missile Refueling Area Berm		449,000	90,000	160,000	699,000		
AW	Acid Neutralization Pit		11,000	2,000	3,000	17,000		
AX	Missile Refueling JP-4 Fuel Area		35,000	7,000	12,000	54,000		
AY	M.M. & A.A., Inactive Septic Sys		124,000	25,000	44,000	192,000		
AZ	M.M. & A.A.,275Gal fuel oil Tank		17,000	3,000	6,000	27,000		
BA	M.M. & A.A., Acid Storage Shed		13,000	3,000	4,000	20,000		
BB	M.M. & A.A., Paint Shed		7,000	1,000	2,000	10,000		
BC	Flammable Storage Block Shed		7,000	1,000	2,000	10,000		
BD	M.M. & A.A., Dry Well		6,000	1,000	1,000	8,000		
BE	Generator Building		9,000	2,000	4,000	15,000		
BF	Horseshoe Site		23,000	5,000	6,000	33,000		
BG	H-52-L Surface Gas Tank Area		35,000	7,000	12,000	55,000		
BH	Elevator Doors		4,000	1,000	0	5,000		
BJ	IU1 Characterization Well		942,000	188,000	226,000	1,356,000		
	HANFORD: REMEDIATION		4,859,000	972,000	1,590,000	7,421,000		

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** PROJECT OWNER SUMMARY - LEVEL 2 (Rounded to 10's) **

TIME 11:21:20
SUMMARY PAGE 2

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
0A MOBILIZATION/DEMOB & PREPWORK							
0A-01 MOBILIZATION AND PREPATORY WORK		10,290	2,060	2,700	15,040		
0A-21 DEMOBILIZATION		7,750	1,550	1,390	10,690		
MOBILIZATION/DEMOB & PREPWORK		18,030	3,610	4,090	25,730		
0B COE QA/SAFETY MONITORING							
0B-91 QA/Safety Monitoring		33,910	6,780	8,140	48,830		
COE QA/SAFETY MONITORING		33,910	6,780	8,140	48,830		2
AA Radar Berm & Pads							
AA-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,470	690	620	4,790		
AA-08 SOLIDS COLLECTION & CONTAINMENT		7,200	1,440	2,110	10,750		
AA-14 THERMAL TREATMENT		23,460	4,690	8,380	36,540		
Radar Berm & Pads		34,130	6,830	11,120	52,070		
AB H-52-C Surface Gas Tank Storage							
AB-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,370	270	250	1,890		
AB-14 THERMAL TREATMENT		34,060	6,810	12,170	53,040		
H-52-C Surface Gas Tank Storage		35,430	7,090	12,410	54,920		
AC Control Center disposal pits (4)							
AC-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,440	490	440	3,370		
AC-08 SOLIDS COLLECTION & CONTAINMENT		7,960	1,590	2,340	11,890		
Control Center disposal pits (4)		10,400	2,080	2,780	15,250		
AD BLDG 6652-C, Abandoned USTs (5)							
AD-02 MONITOR, SAMPLE, TEST, ANALYSIS		7,140	1,430	1,510	10,070		
AD-10 TANKS/MISC DEMOLITION & REMOVAL		12,820	2,560	3,770	19,150		
AD-14 THERMAL TREATMENT		75,300	15,060	26,920	117,280		
BLDG 6652-C, Abandoned USTs (5)		95,250	19,050	32,200	146,500		
AE Pumphouse Disposal Slope							

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** PROJECT OWNER SUMMARY - LEVEL 2 (Rounded to 10's) **

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
AE-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,200	240	220	1,660		
AE-14 THERMAL TREATMENT		22,560	4,510	8,070	35,130		
Pumphouse Disposal Slope		23,760	4,750	8,280	36,790		
AF Pumphouse Latine, 275 Gal tank							
AF-02 MONITOR, SAMPLE, TEST, ANALYSIS		500	100	90	690		
AF-14 THERMAL TREATMENT		3,890	780	1,380	6,060		
Pumphouse Latine, 275 Gal tank		4,390	880	1,470	6,740		
AG Pumphouse Latrine, 1500 Gal tank							
AG-02 MONITOR, SAMPLE, TEST, ANALYSIS		890	180	160	1,230		
AG-14 THERMAL TREATMENT		3,890	780	1,380	6,060		
Pumphouse Latrine, 1500 Gal tank		4,780	960	1,540	7,280		
AH 6652-C SSL Active Septic System							
AH-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,120	620	300	4,050		
AH-14 THERMAL TREATMENT		20,480	4,100	7,310	31,890		
6652-C SSL Active Septic System		23,600	4,720	7,610	35,930		
AI 6652-C SSI Inactive Septic Tank							
AI-02 MONITOR, SAMPLE, TEST, ANALYSIS		4,580	920	300	5,790		
AI-14 THERMAL TREATMENT		488,030	97,610	174,570	760,210		
6652-C SSI Inactive Septic Tank		492,610	98,520	174,870	766,010		
AJ 6652-G ALE F.S. Bldg Septic Tank							
AJ-02 MONITOR, SAMPLE, TEST, ANALYSIS		5,080	1,020	390	6,490		
AJ-14 THERMAL TREATMENT		663,080	132,620	237,290	1,032,980		
6652-G ALE F.S. Bldg Septic Tank		668,160	133,630	237,680	1,039,470		
AK Mound Site NW of BLDG. 6652-G							
AK-02 MONITOR, SAMPLE, TEST, ANALYSIS		4,160	830	1,150	6,140		
AK-14 THERMAL TREATMENT		15,020	3,000	5,370	23,390		

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
Mound Site NW of BLDG. 6652-G		19,180	3,840	6,510	29,530		
AL 6652-I ALE, HQTRs Septic Tank &							
AL-02 MONITOR, SAMPLE, TEST, ANALYSIS		12,590	2,520	300	15,410		
AL-14 THERMAL TREATMENT		1,341,060	268,210	479,910	2,089,180		
6652-I ALE, HQTRs Septic Tank &		1,353,650	270,730	480,210	2,104,590		
AM Abandoned UST, 6652-, 6 tanks							
AM-02 MONITOR, SAMPLE, TEST, ANALYSIS		12,730	2,550	2,560	17,830		
AM-10 TANKS/MISC DEMOLITION & REMOVAL		16,100	3,220	4,950	24,270		
AM-14 THERMAL TREATMENT		89,790	17,960	32,110	139,850		
Abandoned UST, 6652-, 6 tanks		118,620	23,720	39,620	181,960		
AN 6652-G UST, 2,000 Gal fuel oil							
AN-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,280	460	410	3,150		
AN-10 TANKS/MISC DEMOLITION & REMOVAL		3,400	680	1,040	5,130		
AN-14 THERMAL TREATMENT		15,020	3,000	5,370	23,390		
6652-G UST, 2,000 Gal fuel oil		20,700	4,140	6,820	31,670		
AO Missile Bunker sump, undrgnd fac							
AO-02 MONITOR, SAMPLE, TEST, ANALYSIS		4,370	870	1,180	6,420		
Missile Bunker sump, undrgnd fac		4,370	870	1,180	6,420		
AP Missile Bunker Drainfield Active							
AP-02 MONITOR, SAMPLE, TEST, ANALYSIS		8,400	1,680	1,710	11,790		
AP-14 THERMAL TREATMENT		63,470	12,690	22,700	98,860		
Missile Bunker Drainfield Active		71,860	14,370	24,420	110,650		
AQ Main Entrance Stained Soil							
AQ-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,700	740	670	5,110		
AQ-14 THERMAL TREATMENT		22,450	4,490	8,030	34,960		
Main Entrance Stained Soil		26,150	5,230	8,690	40,070		

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
AR Missile Bunker Discharge Ditch							
AR-02 MONITOR, SAMPLE, TEST, ANALYSIS		5,790	1,160	1,040	7,990		
AR-14 THERMAL TREATMENT		59,750	11,950	21,370	93,080		
Missile Bunker Discharge Ditch		65,540	13,110	22,420	101,060		
AS JP4 Fuel Pad							
AS-02 MONITOR, SAMPLE, TEST, ANALYSIS		850	170	150	1,170		
AS-14 THERMAL TREATMENT		6,850	1,370	2,440	10,660		
JP4 Fuel Pad		7,700	1,540	2,590	11,830		
AT NIKE BASE LANDFILL							
AT-02 MONITOR, SAMPLE, TEST, ANALYSIS		22,510	4,500	6,370	33,380		
NIKE BASE LANDFILL		22,510	4,500	6,370	33,380		
AU Missile Bunker Landfill							
AU-02 MONITOR, SAMPLE, TEST, ANALYSIS		22,510	4,500	6,370	33,380		
Missile Bunker Landfill		22,510	4,500	6,370	33,380		
AV Missile Refueling Area Berm							
AV-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,020	400	360	2,790		
AV-14 THERMAL TREATMENT		447,020	89,400	159,970	696,390		
Missile Refueling Area Berm		449,040	89,810	160,330	699,180		
AW Acid Neutralization Pit							
AW-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,070	210	190	1,480		
AW-08 SOLIDS COLLECTION & CONTAINMENT		10,380	2,080	3,070	15,530		
Acid Neutralization Pit		11,450	2,290	3,270	17,010		
AX Missile Refueling JP-4 Fuel Area							
AX-02 MONITOR, SAMPLE, TEST, ANALYSIS		850	170	150	1,170		
AX-14 THERMAL TREATMENT		33,910	6,780	12,120	52,820		

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
Missile Refueling JP-4 Fuel Area		34,760	6,950	12,280	54,000		
AY M.M. & A.A., Inactive Septic Sys							
AY-02 MONITOR, SAMPLE, TEST, ANALYSIS		8,280	1,660	2,250	12,190		
AY-14 THERMAL TREATMENT		115,470	23,090	41,320	179,890		
M.M. & A.A., Inactive Septic Sys		123,750	24,750	43,570	192,070		
AZ M.M. & A.A.,275Gal fuel oil Tank							
AZ-02 MONITOR, SAMPLE, TEST, ANALYSIS		530	110	100	730		
AZ-10 TANKS/MISC DEMOLITION & REMOVAL		1,580	320	480	2,370		
AZ-14 THERMAL TREATMENT		15,090	3,020	5,390	23,500		
M.M. & A.A.,275Gal fuel oil Tank		17,200	3,440	5,970	26,610		
BA M.M. & A.A., Acid Storage Shed							
BA-02 MONITOR, SAMPLE, TEST, ANALYSIS		870	170	160	1,210		
BA-08 SOLIDS COLLECTION & CONTAINMENT		12,270	2,450	3,650	18,380		
M.M. & A.A., Acid Storage Shed		13,150	2,630	3,800	19,580		
BB M.M. & A.A., Paint Shed							
BB-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,110	220	200	1,540		
BB-08 SOLIDS COLLECTION & CONTAINMENT		5,390	1,080	1,600	8,060		
M.M. & A.A., Paint Shed		6,500	1,300	1,800	9,600		
BC Flammable Storage Block Shed							
BC-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,110	220	200	1,540		
BC-08 SOLIDS COLLECTION & CONTAINMENT		5,390	1,080	1,600	8,060		
Flammable Storage Block Shed		6,500	1,300	1,800	9,600		
BD M.M. & A.A., Dry Well							
BD-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,210	440	400	3,050		
BD-08 SOLIDS COLLECTION & CONTAINMENT		3,600	720	1,070	5,380		
M.M. & A.A., Dry Well		5,800	1,160	1,460	8,430		

	QUANTITY UOM	CONTRACT	S & A	CONTG	TOTAL COST	UNIT COST	NOTES
BE Generator Building							
BE-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,020	400	360	2,790		
BE-10 STRUCTURES/MISC DEMO & REMOVAL		7,130	1,430	3,400	11,960		
Generator Building		9,150	1,830	3,770	14,750		
BF Horseshoe Site							
BF-02 MONITOR, SAMPLE, TEST, ANALYSIS		22,510	4,500	6,370	33,380		
Horseshoe Site		22,510	4,500	6,370	33,380		
BG H-52-L Surface Gas Tank Area							
BG-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,370	270	250	1,890		
BG-14 THERMAL TREATMENT		33,910	6,780	12,120	52,820		
H-52-L Surface Gas Tank Area		35,280	7,060	12,370	54,710		
BH Elevator Doors							
BH-02 MONITOR, SAMPLE, TEST, ANALYSIS		440	90	80	610		
BH-10 STRUCTURES/MISC DEMO & REMOVAL		3,950	790	0	4,740		
Elevator Doors		4,390	880	80	5,350		
BJ IU1 Characterization Well							
BJ-02 MONITOR, SAMPLE, TEST, ANALYSIS		941,920	188,380	226,060	1,356,370		
IU1 Characterization Well		941,920	188,380	226,060	1,356,370		
HANFORD: REMEDIATION		4,858,660	971,730	1,590,330	7,420,720		

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** PROJECT INDIRECT SUMMARY - LEVEL 1 (Rounded to 10's) **

TIME 11:21:20

SUMMARY PAGE 8

		QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
0A	MOBILIZATION/DEMOB & PREPWORK		13,620	2,040	780	1,320	100	180	18,030	
0B	COE QA/SAFETY MONITORING		25,600	3,840	1,470	2,470	190	340	33,910	
AA	Radar Berm & Pads		25,770	3,860	1,480	2,490	190	340	34,130	
AB	H-52-C Surface Gas Tank Storage		26,740	4,010	1,540	2,580	200	350	35,430	
AC	Control Center disposal pits (4)		7,850	1,180	450	760	60	100	10,400	
AD	BLDG 6652-C, Abandoned USTs (5)		71,910	10,790	4,130	6,950	530	940	95,250	
AE	Pumphouse Disposal Slope		17,940	2,690	1,030	1,730	130	240	23,760	
AF	Pumphouse Latine, 275 Gal tank		3,310	500	190	320	20	40	4,390	
AG	Pumphouse Latrine, 1500 Gal tank		3,610	540	210	350	30	50	4,780	
AH	6652-C SSL Active Septic System		17,820	2,670	1,020	1,720	130	230	23,600	
AI	6652-C SSI Inactive Septic Tank		371,880	55,780	21,380	35,920	2,760	4,880	492,610	
AJ	6652-G ALE F.S. Bldg Septic Tank		504,410	75,660	29,000	48,730	3,740	6,620	668,160	
AK	Mound Site NW of BLDG. 6652-G		14,480	2,170	830	1,400	110	190	19,180	
AL	6652-I ALE, HQTRs Septic Tank &		1,021,900	153,290	58,760	98,720	7,580	13,400	1,353,650	
AM	Abandoned UST, 6652-, 6 tanks		89,550	13,430	5,150	8,650	660	1,170	118,620	
AN	6652-G UST, 2,000 Gal fuel oil		15,630	2,340	900	1,510	120	200	20,700	
AO	Missile Bunker sump, undrgnd fac		3,300	490	190	320	20	40	4,370	
AP	Missile Bunker Drainfield Active		54,250	8,140	3,120	5,240	400	710	71,860	
AQ	Main Entrance Stained Soil		19,740	2,960	1,140	1,910	150	260	26,150	
AR	Missile Bunker Discharge Ditch		49,480	7,420	2,840	4,780	370	650	65,540	
AS	JP4 Fuel Pad		5,810	870	330	560	40	80	7,700	
AT	NIKE BASE LANDFILL		16,990	2,550	980	1,640	130	220	22,510	
AU	Missile Bunker Landfill		16,990	2,550	980	1,640	130	220	22,510	
AV	Missile Refueling Area Berm		338,990	50,850	19,490	32,750	2,520	4,450	449,040	
AW	Acid Neutralization Pit		8,650	1,300	500	840	60	110	11,450	
AX	Missile Refueling JP-4 Fuel Area		26,240	3,940	1,510	2,540	190	340	34,760	
AY	M.M. & A.A., Inactive Septic Sys		93,420	14,010	5,370	9,020	690	1,230	123,750	
AZ	M.M. & A.A.,275Gal fuel oil Tank		12,990	1,950	750	1,250	100	170	17,200	
BA	M.M. & A.A., Acid Storage Shed		9,930	1,490	570	960	70	130	13,150	
BB	M.M. & A.A., Paint Shed		4,910	740	280	470	40	60	6,500	
BC	Flammable Storage Block Shed		4,910	740	280	470	40	60	6,500	
BD	M.M. & A.A., Dry Well		4,380	660	250	420	30	60	5,800	
BE	Generator Building		6,910	1,040	400	670	50	90	9,150	
BF	Horseshoe Site		16,990	2,550	980	1,640	130	220	22,510	
BG	H-52-L Surface Gas Tank Area		26,630	4,000	1,530	2,570	200	350	35,280	
BH	Elevator Doors		3,320	500	190	320	20	40	4,390	
BJ	IU1 Characterization Well		711,080	106,660	40,890	68,690	5,280	9,330	941,920	
	HANFORD: REMEDIATION		3,667,920	550,190	210,910	354,320	27,220	48,110	4,858,660	
	S & A								971,730	
	SUBTOTAL								5,830,390	
	CONTINGENCY								1,590,330	
	TOTAL INCL OWNER COSTS								7,420,720	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
OA MOBILIZATION/DEMOB & PREPWORK									
OA-01 MOBILIZATION AND PREPATORY WORK		7,770	1,160	450	750	60	100	10,290	
OA-21 DEMOBILIZATION		5,850	880	340	570	40	80	7,750	
MOBILIZATION/DEMOB & PREPWORK		13,620	2,040	780	1,320	100	180	18,030	
OB COE QA/SAFETY MONITORING									
OB-91 QA/Safety Monitoring		25,600	3,840	1,470	2,470	190	340	33,910	
COE QA/SAFETY MONITORING		25,600	3,840	1,470	2,470	190	340	33,910	
AA Radar Berm & Pads									
AA-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,620	390	150	250	20	30	3,470	
AA-08 SOLIDS COLLECTION & CONTAINMENT		5,430	820	310	520	40	70	7,200	
AA-14 THERMAL TREATMENT		17,710	2,660	1,020	1,710	130	230	23,460	
Radar Berm & Pads		25,770	3,860	1,480	2,490	190	340	34,130	
AB H-52-C Surface Gas Tank Storage									
AB-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,030	150	60	100	10	10	1,370	
AB-14 THERMAL TREATMENT		25,710	3,860	1,480	2,480	190	340	34,060	
H-52-C Surface Gas Tank Storage		26,740	4,010	1,540	2,580	200	350	35,430	
AC Control Center disposal pits (4)									
AC-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,840	280	110	180	10	20	2,440	
AC-08 SOLIDS COLLECTION & CONTAINMENT		6,010	900	350	580	40	80	7,960	
Control Center disposal pits (4)		7,850	1,180	450	760	60	100	10,400	
AD BLDG 6652-C, Abandoned USTs (5)									
AD-02 MONITOR, SAMPLE, TEST, ANALYSIS		5,390	810	310	520	40	70	7,140	
AD-10 TANKS/MISC DEMOLITION & REMOVAL		9,680	1,450	560	930	70	130	12,820	
AD-14 THERMAL TREATMENT		56,840	8,530	3,270	5,490	420	750	75,300	
BLDG 6652-C, Abandoned USTs (5)		71,910	10,790	4,130	6,950	530	940	95,250	
AE Pumphouse Disposal Slope									

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
AE-02 MONITOR, SAMPLE, TEST, ANALYSIS		910	140	50	90	10	10	1,200	
AE-14 THERMAL TREATMENT		17,030	2,550	980	1,640	130	220	22,560	
Pumphouse Disposal Slope		17,940	2,690	1,030	1,730	130	240	23,760	
AF Pumphouse Latine, 275 Gal tank									
AF-02 MONITOR, SAMPLE, TEST, ANALYSIS		380	60	20	40	0	0	500	
AF-14 THERMAL TREATMENT		2,940	440	170	280	20	40	3,890	
Pumphouse Latine, 275 Gal tank		3,310	500	190	320	20	40	4,390	
AG Pumphouse Latrine, 1500 Gal tank									
AG-02 MONITOR, SAMPLE, TEST, ANALYSIS		670	100	40	60	0	10	890	
AG-14 THERMAL TREATMENT		2,940	440	170	280	20	40	3,890	
Pumphouse Latrine, 1500 Gal tank		3,610	540	210	350	30	50	4,780	
AH 6652-C SSL Active Septic System									
AH-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,360	350	140	230	20	30	3,120	
AH-14 THERMAL TREATMENT		15,460	2,320	890	1,490	110	200	20,480	
6652-C SSL Active Septic System		17,820	2,670	1,020	1,720	130	230	23,600	
AI 6652-C SSI Inactive Septic Tank									
AI-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,460	520	200	330	30	50	4,580	
AI-14 THERMAL TREATMENT		368,430	55,260	21,180	35,590	2,730	4,830	488,030	
6652-C SSI Inactive Septic Tank		371,880	55,780	21,380	35,920	2,760	4,880	492,610	
AJ 6652-G ALE F.S. Bldg Septic Tank									
AJ-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,840	580	220	370	30	50	5,080	
AJ-14 THERMAL TREATMENT		500,570	75,090	28,780	48,360	3,710	6,570	663,080	
6652-G ALE F.S. Bldg Septic Tank		504,410	75,660	29,000	48,730	3,740	6,620	668,160	
AK Mound Site NW of BLDG. 6652-G									
AK-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,140	470	180	300	20	40	4,160	
AK-14 THERMAL TREATMENT		11,340	1,700	650	1,100	80	150	15,020	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
Mound Site NW of BLDG. 6652-G		14,480	2,170	830	1,400	110	190	19,180	
AL 6652-I ALE, HQTRs Septic Tank &									
AL-02 MONITOR, SAMPLE, TEST, ANALYSIS		9,510	1,430	550	920	70	120	12,590	
AL-14 THERMAL TREATMENT		1,012,400	151,860	58,210	97,800	7,510	13,280	1,341,060	
6652-I ALE, HQTRs Septic Tank &		1,021,900	153,290	58,760	98,720	7,580	13,400	1,353,650	
AM Abandoned UST, 6652-, 6 tanks									
AM-02 MONITOR, SAMPLE, TEST, ANALYSIS		9,610	1,440	550	930	70	130	12,730	
AM-10 TANKS/MISC DEMOLITION & REMOVAL		12,160	1,820	700	1,170	90	160	16,100	
AM-14 THERMAL TREATMENT		67,780	10,170	3,900	6,550	500	890	89,790	
Abandoned UST, 6652-, 6 tanks		89,550	13,430	5,150	8,650	660	1,170	118,620	
AN 6652-G UST, 2,000 Gal fuel oil									
AN-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,720	260	100	170	10	20	2,280	
AN-10 TANKS/MISC DEMOLITION & REMOVAL		2,570	390	150	250	20	30	3,400	
AN-14 THERMAL TREATMENT		11,340	1,700	650	1,100	80	150	15,020	
6652-G UST, 2,000 Gal fuel oil		15,630	2,340	900	1,510	120	200	20,700	
AO Missile Bunker sump, undrgnd fac									
AO-02 MONITOR, SAMPLE, TEST, ANALYSIS		3,300	490	190	320	20	40	4,370	
Missile Bunker sump, undrgnd fac		3,300	490	190	320	20	40	4,370	
AP Missile Bunker Drainfield Active									
AP-02 MONITOR, SAMPLE, TEST, ANALYSIS		6,340	950	360	610	50	80	8,400	
AP-14 THERMAL TREATMENT		47,910	7,190	2,750	4,630	360	630	63,470	
Missile Bunker Drainfield Active		54,250	8,140	3,120	5,240	400	710	71,860	
AQ Main Entrance Stained Soil									
AQ-02 MONITOR, SAMPLE, TEST, ANALYSIS		2,790	420	160	270	20	40	3,700	
AQ-14 THERMAL TREATMENT		16,950	2,540	970	1,640	130	220	22,450	
Main Entrance Stained Soil		19,740	2,960	1,140	1,910	150	260	26,150	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
AR Missile Bunker Discharge Ditch									
AR-02 MONITOR, SAMPLE, TEST, ANALYSIS		4,370	660	250	420	30	60	5,790	
AR-14 THERMAL TREATMENT		45,110	6,770	2,590	4,360	330	590	59,750	
Missile Bunker Discharge Ditch		49,480	7,420	2,840	4,780	370	650	65,540	
AS JP4 Fuel Pad									
AS-02 MONITOR, SAMPLE, TEST, ANALYSIS		640	100	40	60	0	10	850	
AS-14 THERMAL TREATMENT		5,170	780	300	500	40	70	6,850	
JP4 Fuel Pad		5,810	870	330	560	40	80	7,700	
AT NIKE BASE LANDFILL									
AT-02 MONITOR, SAMPLE, TEST, ANALYSIS		16,990	2,550	980	1,640	130	220	22,510	
NIKE BASE LANDFILL		16,990	2,550	980	1,640	130	220	22,510	
AU Missile Bunker Landfill									
AU-02 MONITOR, SAMPLE, TEST, ANALYSIS		16,990	2,550	980	1,640	130	220	22,510	
Missile Bunker Landfill		16,990	2,550	980	1,640	130	220	22,510	
AV Missile Refueling Area Berm									
AV-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,520	230	90	150	10	20	2,020	
AV-14 THERMAL TREATMENT		337,470	50,620	19,400	32,600	2,500	4,430	447,020	
Missile Refueling Area Berm		338,990	50,850	19,490	32,750	2,520	4,450	449,040	
AW Acid Neutralization Pit									
AW-02 MONITOR, SAMPLE, TEST, ANALYSIS		810	120	50	80	10	10	1,070	
AW-08 SOLIDS COLLECTION & CONTAINMENT		7,840	1,180	450	760	60	100	10,380	
Acid Neutralization Pit		8,650	1,300	500	840	60	110	11,450	
AX Missile Refueling JP-4 Fuel Area									
AX-02 MONITOR, SAMPLE, TEST, ANALYSIS		640	100	40	60	0	10	850	
AX-14 THERMAL TREATMENT		25,600	3,840	1,470	2,470	190	340	33,910	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
Missile Refueling JP-4 Fuel Area		26,240	3,940	1,510	2,540	190	340	34,760	
AY M.M. & A.A., Inactive Septic Sys									
AY-02 MONITOR, SAMPLE, TEST, ANALYSIS		6,250	940	360	600	50	80	8,280	
AY-14 THERMAL TREATMENT		87,170	13,080	5,010	8,420	650	1,140	115,470	
M.M. & A.A., Inactive Septic Sys		93,420	14,010	5,370	9,020	690	1,230	123,750	
AZ M.M. & A.A.,275Gal fuel oil Tank									
AZ-02 MONITOR, SAMPLE, TEST, ANALYSIS		400	60	20	40	0	10	530	
AZ-10 TANKS/MISC DEMOLITION & REMOVAL		1,190	180	70	120	10	20	1,580	
AZ-14 THERMAL TREATMENT		11,390	1,710	660	1,100	80	150	15,090	
M.M. & A.A.,275Gal fuel oil Tank		12,990	1,950	750	1,250	100	170	17,200	
BA M.M. & A.A., Acid Storage Shed									
BA-02 MONITOR, SAMPLE, TEST, ANALYSIS		660	100	40	60	0	10	870	
BA-08 SOLIDS COLLECTION & CONTAINMENT		9,270	1,390	530	900	70	120	12,270	
M.M. & A.A., Acid Storage Shed		9,930	1,490	570	960	70	130	13,150	
BB M.M. & A.A., Paint Shed									
BB-02 MONITOR, SAMPLE, TEST, ANALYSIS		840	130	50	80	10	10	1,110	
BB-08 SOLIDS COLLECTION & CONTAINMENT		4,070	610	230	390	30	50	5,390	
M.M. & A.A., Paint Shed		4,910	740	280	470	40	60	6,500	
BC Flammable Storage Block Shed									
BC-02 MONITOR, SAMPLE, TEST, ANALYSIS		840	130	50	80	10	10	1,110	
BC-08 SOLIDS COLLECTION & CONTAINMENT		4,070	610	230	390	30	50	5,390	
Flammable Storage Block Shed		4,910	740	280	470	40	60	6,500	
BD M.M. & A.A., Dry Well									
BD-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,670	250	100	160	10	20	2,210	
BD-08 SOLIDS COLLECTION & CONTAINMENT		2,710	410	160	260	20	40	3,600	
M.M. & A.A., Dry Well		4,380	660	250	420	30	60	5,800	

	QUANTITY UOM	DIRECT	FOOH	HOOH	PROF	BOND	B&O TAX	TOTAL COST	UNIT COST
BE Generator Building									
BE-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,530	230	90	150	10	20	2,020	
BE-10 STRUCTURES/MISC DEMO & REMOVAL		5,380	810	310	520	40	70	7,130	
Generator Building		6,910	1,040	400	670	50	90	9,150	
BF Horseshoe Site									
BF-02 MONITOR, SAMPLE, TEST, ANALYSIS		16,990	2,550	980	1,640	130	220	22,510	
Horseshoe Site		16,990	2,550	980	1,640	130	220	22,510	
BG H-52-L Surface Gas Tank Area									
BG-02 MONITOR, SAMPLE, TEST, ANALYSIS		1,030	150	60	100	10	10	1,370	
BG-14 THERMAL TREATMENT		25,600	3,840	1,470	2,470	190	340	33,910	
H-52-L Surface Gas Tank Area		26,630	4,000	1,530	2,570	200	350	35,280	
BH Elevator Doors									
BH-02 MONITOR, SAMPLE, TEST, ANALYSIS		340	50	20	30	0	0	440	
BH-10 STRUCTURES/MISC DEMO & REMOVAL		2,980	450	170	290	20	40	3,950	
Elevator Doors		3,320	500	190	320	20	40	4,390	
BJ IU1 Characterization Well									
BJ-02 MONITOR, SAMPLE, TEST, ANALYSIS		711,080	106,660	40,890	68,690	5,280	9,330	941,920	
IU1 Characterization Well		711,080	106,660	40,890	68,690	5,280	9,330	941,920	
HANFORD: REMEDIATION		3,667,920	550,190	210,910	354,320	27,220	48,110	4,858,660	
S & A								971,730	
SUBTOTAL								5,830,390	
CONTINGENCY								1,590,330	
TOTAL INCL OWNER COSTS								7,420,720	

0-AA. REMEDIAL GENERAL CONTRACTOR	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

0-AA. REMEDIAL GENERAL CONTRACTOR

Overhead Percentage Explanation:

Field office Overhead (FOOH): Normal is 10%, using 15% to allow for extra safety and Hanford related items.

Home office Overhead (HOOH): 4-5% is normal for this size of job.

PROFIT: 7-8% is normal for this size of job. However, PROFIT may be calculated separately for each job using the Weighted-Guide Line Method.

BOND: Calculated per dollar amount of job using B Bond rates by GOLD.

B&O TAX: 1% covers the 0.5% WA State B&O tax, and the 0.5% TARO tax.

0-AA BA. Geophysical Survey SubContractor
Assume using quote from Geophysical Survey Sub, so no further markups are needed.

0-AA BB. Soil Gas Survey SubContractor
Assume using quote from Soil Gas Survey Sub, so no further markup needed.

0A. MOBILIZATION/DEMOB & PREPWORK
This item will cover all costs for Mob/Demob & Prepwork associated with the 1100-IU-1 Area waste sites, as it is assumed one Contractor will do all sites at one time. The Mob/Demob & Prepwork for the On-site Incinerator is covered in the EM-2 Estimate.

0A-01. MOBILIZATION AND PREPATORY WORK

0A-01 01. MOB OF EQUIPMENT & PERSONNEL

0A-01 01 01. Mob of Equipment & Facilities
Mob of equipment, equipment list from Summary. A 100-mi Radius assumed.

USR AA <01505 1101 >	Mob, Field Office Trailer 100-mi Radius	1.00	EA		0.00	0.00	0.00	250.00	0.00	0.00	250.00	250.00
					0.00	0.00	0.00	250	0	0	250	
CIV AA <01505 2103 >	Mob, Hyd Excav, 1.1-1.5 CY, Cwlr Mtd, 100-mi Rad	1.00	EA	N/A	0.00	0.00	0.00	525.00	0.00	0.00	525.00	525.00
					0.00	0.00	0.00	525	0	0	525	
USR AA <01505 3235 >	Mob, FEnd Ldr, wheel 1.5-3 CY Atriculated Fr, 100-mi Radius	1.00	EA		0.00	0.00	0.00	750.00	0.00	0.00	750.00	750.00
					0.00	0.00	0.00	750	0	0	750	
USR AA <01505 6115 >	Mob, Dozer, Crawler, 50-100 hp w/blade, incl set up 100 mi radius	1.00	EA		0.00	0.00	0.00	750.00	0.00	0.00	750.00	750.00
					0.00	0.00	0.00	750	0	0	750	
USR AA <01505 7131 >	Mob, Water Tank, 3,000 Gal, Mtd/FT800 Trk, 100-mi Radius	1.00	EA		0.00	0.00	0.00	150.00	0.00	0.00	150.00	150.00
					0.00	0.00	0.00	150	0	0	150	

0A-01. MOBILIZATION AND PREPATORY WORK	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01505 8921 > Mob, Decontamination Trailer			0.00	0.00	135.00	0.00	0.00	135.00	
w/25,000 GVW Trk, 100-mi Radius	1.00 EA	0.00	0	0	135	0	0	135	135.00
USR AA <01505 8952 > Mob, Hot Water Blstr, 3,200 psi			0.00	0.00	75.00	0.00	0.00	75.00	
100-mi Radius	1.00 EA	0.00	0	0	75	0	0	75	75.00
Mob of Equipment & Facilities			0	0	2,635	0	0	2,635	
MOB OF EQUIPMENT & PERSONNEL			0	0	2,635	0	0	2,635	
0A-01 03. SETUP/CONSTRUCT TEMP FACILITIES									
0A-01 03 01. TRAILERS AND BUILDINGS Allow 100 mhrs for setup of Contractor's trailer, equipment, and site layout. An allowance for some equipment and materials has been added.									
TRAILERS AND BUILDINGS	100.00 HR		0	2,500	250	100	0	2,850	28.50
0A-01 03 02. DECONTAMINATION FACILITIES									
0A-01 03 02 01. Personnel Decon Facilities Allow 80 mhrs for setup of the Personnel Decon trailer. Self contained unit includes changing rooms and showers. An allowance for some material and equipment has been included.									
Personnel Decon Facilities	80.00 HR		0	2,000	200	80	0	2,280	28.50
0A-01 03 02 02. Equip/Vehicle Decon Facilities A equipment/vehicle washdown facility exists in the 1100-EM-2 area, so assume it will be used for all waste site equipment decontamination. Decon water will be transported by a WHC truck to an on-site (Hanford) disposal area.									
Equip/Vehicle Decon Facilities			0	0	0	0	0	0	
DECONTAMINATION FACILITIES			0	2,000	200	80	0	2,280	
SETUP/CONSTRUCT TEMP FACILITIES			0	4,500	450	180	0	5,130	
MOBILIZATION AND PREPATORY WORK			0	4,500	3,085	180	0	7,765	

OA-21. DEMOBILIZATION	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
OA-21. DEMOBILIZATION									
OA-21 04. DEMOB OF EQUIPMENT & PERSONNEL									
OA-21 04 01. Demob Equipment/Facilities									
Allow 75% of Mob & Setup for Demob.									
Demob Equipment/Facilities			0	0	5,850	0	0	5,850	
DEMOB OF EQUIPMENT & PERSONNEL			0	0	5,850	0	0	5,850	
DEMOBILIZATION			0	0	5,850	0	0	5,850	
MOBILIZATION/DEMOB & PREPWORK			0	4,500	8,935	180	0	13,615	

OB-91. QA/Safety Monitoring	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

OB. COE QA/SAFETY MONITORING
This item will cover all costs associated with COE QA/Safety Monitoring for the 1100-IU-1 Area waste sites.
OB-91. QA/Safety Monitoring

OB-91 01. QA/Safety Monitoring
Safety/QA Crew:

WHC HPT:	$50/hr x 0 hrs =	$ 0	(HPT not need for the
COE Safety:	$70/hr x 40 hrs =	$2,800	1100-EM area, non rad)
COE Special Assist. QA:	$50/hr x 8 hrs =	$ 400	
Total cost/week		$3,200	

The duration of remediation actions for the 1100-IU-1 area is estimated at 8 weeks (does not include drilling well).

QA/Safety Monitoring	8.00	WK			0	25,600	0	0	0	25,600	3200.00
QA/Safety Monitoring					0	25,600	0	0	0	25,600	
COE QA/SAFETY MONITORING					0	25,600	0	0	0	25,600	

AA-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

AA. Radar Berm & Pads
Waste Site: Radar Berm & Pads

Site Considerations:
basalt berm check for hydraulic fluid stains,
2 concrete pads: 16x28 and 16x16 (this is a "top" site)

Potential Remedial Activity:
Sample soil/berm, remove waste (31 CY PCBs to OSI, 13 CY to TSDF)

AA-02. MONITOR, SAMPLE, TEST, ANALYSIS

AA-02 06. SAMPLING SOIL, SED & SOLID WASTE

AA-02 06 01. SURFACE SOIL

AA-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > TPH, In-field Test	3.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	161.70 485	0.00 0	161.70 485	161.70
USR AA <01954 760 > PCB, In-field Test	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	183.26 733	0.00 0	183.26 733	183.26
USR AA <01954 760 > 8080, PCB - soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 540	135.00 540	135.00
USR AA <01954 760 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Confirmatory Samples & Analyses					0	480	0	1,218	920	2,618	
SURFACE SOIL					0	480	0	1,218	920	2,618	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	1,218	920	2,618	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	1,218	920	2,618	

AA-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AA-08. SOLIDS COLLECTION & CONTAINMENT											
AA-08 01. EXCAVATION											
AA-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.											
L USR AA <02220 0000 > Excavate con. soil & Waste					0.08	2.02	1.68	0.00	0.00	3.69	
Use a 1.1 swell factor.	14.30	CY	XXQMV	25.00	1	29	24	0	0	53	3.69
USR AA <02220 0000 > Load excavated soil & conc pad					0.03	0.68	1.46	0.00	0.00	2.13	
Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	14.30	CY	XXQMG	40.00	0	10	21	0	0	31	2.13
Excav/Load Cont. Soil & Waste	13.00	CY			2	39	45	0	0	83	6.41
AA-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.											
USR AA <02220 0000 > Transport soil to Arlington, OR					0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	1.00	TRK		0.00	0	0	0	0	400	400	400.00
USR AA <02220 0000 > Disposal of soil in landfill					0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	22.17	TON		0.00	0	0	0	0	2,970	2,970	134.00
USR AA <02220 0000 > Oregon state environmental tax					0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	22.17	TON		0.00	0	0	0	0	665	665	30.00
USR AA <02220 0000 > Soil profile fee					0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00	EA		0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	13.00	CY			0	0	0	0	4,335	4,335	333.47
AA-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	4.00	EA	N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	4.00	EA	N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	4.00	PR	N/A	0.00	0	0	9	0	0	9	2.30

AA-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 80	0.00 0	19.94 80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	1.00 DAY ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
HTW AA <01951 5723 > Cartridges, Respirator	8.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 207	0.00 0	25.87 207	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
AA-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.50 DAY XXQNA	0.13	14.00 7	365.22 183	126.91 63	0.00 0	0.00 0	492.13 246	492.13
Site Re-grading	0.50 DAY		7	183	63	0	0	246	492.13
EXCAVATION			19	455	165	379	4,435	5,434	
SOLIDS COLLECTION & CONTAINMENT			19	455	165	379	4,435	5,434	

AA-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AA-14. THERMAL TREATMENT											
AA-14 01. INCINERATION											
AA-14 01 01. SOLIDS PREPARATION AND HANDLING											
AA-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AA-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Class D	0.50	DAY			5	117	28	46	50	241	482.91
AA-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	103.85	SY	ULABC	555.56	0.01 1	0.15 15	0.00 0	0.27 28	0.50 52	0.92 95	0.92
Plastic Cover, Excavation Area	103.85	SY			1	15	0	28	52	95	0.92

AA-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AA-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	34.72	CY	CODEG	20.00	3	70	21	0	0	91	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	34.72	CY	COEID	10.00	3	92	80	0	0	171	4.93
Excavate, haul to Incinerator	31.00	CY			6	162	100	0	0	262	8.46
AA-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	34.72	LCY		0.00	0	0	0	0	16,926	16,926	487.50
On-site Incineration	31.00	CY			0	0	0	0	16,926	16,926	546.00
AA-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	31.56	CY	CODTE	30.00	1	37	46	0	0	83	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	11.74	CY	COEID	20.00	1	15	13	44	0	73	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	11.74	CY	CODTE	30.00	0	14	17	0	0	31	2.65
Disposal, On-site	28.18	CY			2	67	77	44	0	188	6.66
On-site Incineration	31.00	CY			14	361	205	118	17,028	17,713	571.38

AA-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					14	361	205	118	17,028	17,713	
INCINERATION					14	361	205	118	17,028	17,713	
THERMAL TREATMENT					14	361	205	118	17,028	17,713	
Radar Berm & Pads					33	1,297	370	1,715	22,383	25,765	

AB-02. MONITOR, SAMPLE, TEST, ANALYSIS

AB. H-52-C Surface Gas Tank Storage
Waste Site: H-52-C Surface Gas Tank Storage Area (2 - 475 Gal tanks)

Site Considerations:
20 x 20 x 3 (this is a "top" site)

Potential Remedial Activity:
Take sample, remove waste to OSI (45 CY given)
AB-02. MONITOR, SAMPLE, TEST, ANALYSIS

AB-02 06. SAMPLING SOIL, SED & SOLID WASTE

AB-02 06 01. SURFACE SOIL

AB-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	4.00	EA	N/A	0.00	0	0	0	0	120	120	30.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	135.00	135.00	
	2.00	EA	N/A	0.00	0	0	0	0	270	270	135.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	390	1,032	
SURFACE SOIL					0	480	0	162	390	1,032	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	390	1,032	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	390	1,032	

AB-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AB-14. THERMAL TREATMENT											
AB-14 01. INCINERATION											
AB-14 01 01. SOLIDS PREPARATION AND HANDLING											
AB-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AB-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.90	EA	N/A	0.00	0.00 0	0.00 0	11.50 33	0.00 0	0.00 0	11.50 33	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.90	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 22	0.00 0	7.55 22	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.90	PR	N/A	0.00	0.00 0	0.00 0	2.30 7	0.00 0	0.00 0	2.30 7	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.73	DAY	ULABA	0.13	10.00 7	234.30 170	1.45 1	34.83 25	0.00 0	270.58 196	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.73	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 20	0.00 0	26.95 20	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.73	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 73	100.00 73	100.00
PPEquip, Class D	0.73	DAY			7	170	41	67	73	350	482.91
AB-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	150.75	SY	ULABC	555.56	0.01 1	0.15 22	0.00 0	0.27 41	0.50 75	0.92 138	0.92
Plastic Cover, Excavation Area	150.75	SY			1	22	0	41	75	138	0.92

AB-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AB-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	50.40 CY	CODEG	20.00	0.08 4	2.03 102	0.60 30	0.00 0	0.00 0	2.63 132	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	50.40 CY	COEID	10.00	0.10 5	2.64 133	2.29 115	0.00 0	0.00 0	4.93 248	4.93
Excavate, haul to Incinerator	45.00 CY			9	235	146	0	0	381	8.46
AB-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	50.40 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 24,570	487.50 24,570	487.50
On-site Incineration	45.00 CY			0	0	0	0	24,570	24,570	546.00
AB-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	45.82 CY	CODTE	30.00	0.04 2	1.19 54	1.46 67	0.00 0	0.00 0	2.65 121	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	17.05 CY	COEID	20.00	0.05 1	1.32 22	1.15 20	3.77 64	0.00 0	6.24 106	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	17.05 CY	CODTE	30.00	0.04 1	1.19 20	1.46 25	0.00 0	0.00 0	2.65 45	2.65
Disposal, On-site	40.91 CY			3	97	111	64	0	273	6.66
On-site Incineration	45.00 CY			21	525	298	172	24,718	25,712	571.38

AB-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					21	525	298	172	24,718	25,712	
INCINERATION					21	525	298	172	24,718	25,712	
THERMAL TREATMENT					21	525	298	172	24,718	25,712	
H-52-C Surface Gas Tank Storage					21	1,005	298	333	25,108	26,744	

AC-02. MONITOR, SAMPLE, TEST, ANALYSIS

AC. Control Center disposal pits (4)
Waste Site: Control Center disposal pits (4)

Site Considerations:
None given

Potential Remedial Activity:
Take soil samples, remove waste to TSDF (15 CY given)
AC-02. MONITOR, SAMPLE, TEST, ANALYSIS

AC-02 06. SAMPLING SOIL, SED & SOLID WASTE

AC-02 06 01. SURFACE SOIL

AC-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	8.00	EA	N/A	0.00	0	0	0	0	240	240	30.00
USR AA <01954 760 > 8240, VOA - volatile organics					0.00	0.00	0.00	0.00	205.00	205.00	
	4.00	EA	N/A	0.00	0	0	0	0	820	820	205.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
USR AA <01954 760 > Test Pit (3' W x 6' D) Use small backhoe for a couple of hours.					4.00	90.00	50.00	0.00	0.00	140.00	
	1.00	LS	N/A	0.00	4	90	50	0	0	140	140.00
Confirmatory Samples & Analyses					4	570	50	162	1,060	1,842	
SURFACE SOIL					4	570	50	162	1,060	1,842	
SAMPLING SOIL, SED & SOLID WASTE					4	570	50	162	1,060	1,842	
MONITOR, SAMPLE, TEST, ANALYSIS					4	570	50	162	1,060	1,842	

AC-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AC-08. SOLIDS COLLECTION & CONTAINMENT									
AC-08 01. EXCAVATION									
AC-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.									
L USR AA <02220 0000 > Excavate con. soil & Waste			0.08	2.02	1.68	0.00	0.00	3.69	
Use a 1.1 swell factor.	16.50 CY XXQMV	25.00	1	33	28	0	0	61	3.69
USR AA <02220 0000 > Load excavated soil & conc pad			0.03	0.68	1.46	0.00	0.00	2.13	
Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	16.50 CY XXQMG	40.00	0	11	24	0	0	35	2.13
Excav/Load Cont. Soil & Waste	15.00 CY		2	44	52	0	0	96	6.41
AC-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.									
USR AA <02220 0000 > Transport soil to Arlington, OR			0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	1.00 TRK	0.00	0	0	0	0	400	400	400.00
USR AA <02220 0000 > Disposal of soil in landfill			0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	25.58 TON	0.00	0	0	0	0	3,427	3,427	134.00
USR AA <02220 0000 > Oregon state environmental tax			0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	25.58 TON	0.00	0	0	0	0	767	767	30.00
USR AA <02220 0000 > Soil profile fee			0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00 EA	0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	15.00 CY		0	0	0	0	4,894	4,894	326.29
AC-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)			0.00	0.00	11.50	0.00	0.00	11.50	
	4.00 EA N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek			0.00	0.00	0.00	7.55	0.00	7.55	
	4.00 EA N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves			0.00	0.00	2.30	0.00	0.00	2.30	
	4.00 PR N/A	0.00	0	0	9	0	0	9	2.30

AC-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 80	0.00 0	19.94 80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	1.00 DAY ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
HTW AA <01951 5723 > Cartridges, Respirator	8.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 207	0.00 0	25.87 207	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
AC-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.50 DAY XXQNA	0.13	14.00 7	365.22 183	126.91 63	0.00 0	0.00 0	492.13 246	492.13
Site Re-grading	0.50 DAY		7	183	63	0	0	246	492.13
EXCAVATION			19	461	172	379	4,994	6,006	
SOLIDS COLLECTION & CONTAINMENT			19	461	172	379	4,994	6,006	
Control Center disposal pits (4)			23	1,031	222	540	6,054	7,848	

AD-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AD. BLDG 6652-C, Abandoned USTs (5)										
Waste Site: Building 6652-C, Abandoned USTs, 5 - 1,000 Gal fuel oil										
Site Considerations:										
four USTs may be located under bldg (this is "top" site)										
Potential Remedial Activity:										
Geophysical survey, Ship w/ Confirmatory sampling, Remove USTs,										
Contaminated soils to OSI.										
AD-02. MONITOR, SAMPLE, TEST, ANALYSIS										
AD-02 06. SAMPLING SOIL, SED & SOLID WASTE										
AD-02 06 01. SURFACE SOIL										
AD-02 06 01 02. Confirmatory Samples & Analyses										
Sample & analyze soil, Confirmatory. Analyses cost given below.										
USR AA <01954 760 > TPH, In-field Test				0.00	0.00	0.00	161.70	0.00	161.70	
	5.00	EA N/A	0.00	0	0	0	809	0	809	161.70
USR AA <01954 760 > 8015, TRPH - total recoverable				0.00	0.00	0.00	0.00	135.00	135.00	
petroleum hydrocarbons - mod.	20.00	EA N/A	0.00	0	0	0	0	2,700	2,700	135.00
USR AA <01954 760 > Sample Labor - 2 men				0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses				0	480	0	809	2,700	3,989	
SURFACE SOIL				0	480	0	809	2,700	3,989	
SAMPLING SOIL, SED & SOLID WASTE				0	480	0	809	2,700	3,989	
AD-02 11. GEOTECHNICAL TESTING										
AD-02 11 01. GEOTECH TEST, Geophysical Survey										
Use Geophysical Survey (Ground penetrating radar) to define tank size and location, as well as any adjacent piping. Cost based on quote for doing several tanks at once by Geo Recon, Inc., Seattle.										
GEOTECH TEST, Geophysical Survey	5.00	EA		0	0	0	0	1,400	1,400	280.00
GEOTECHNICAL TESTING				0	0	0	0	1,400	1,400	
MONITOR, SAMPLE, TEST, ANALYSIS				0	480	0	809	4,100	5,389	

AD-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AD-10. TANKS/MISC DEMOLITION & REMOVAL											
AD-10 02. TANK REMOVAL											
AD-10 02 01. UST Tank Excavation & Removal There are five (5) Fuel Oil storage tanks of 1,000 Gal volumes. Assume each tank is made from steel, and use excavation quantity based on 1,000 gal tank.											
L USR AA <02220 0000 > Excavate soil around UST Quantity based 1,000 gal tank	250.00	CY	XXQMV	25.00	0.08 20	2.02 504	1.68 419	0.00 0	0.00 0	3.69 923	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk for disposal by Contractor. Allow 2 Hrs each tank and allow $500 for each tank for disposal	10.00	HR	XXQMV	1.00	2.00 20	50.42 504	41.89 419	0.00 0	250.00 2,500	342.31 3,423	342.31
USR AA <02220 0000 > Dispose 2,500 Gal fuel oil Allow $500 for disposal cost and fees.	1.00	LS		0.00	0.00 0	0.00 0	0.00 0	0.00 0	500.00 500	500.00 500	500.00
UST Tank Excavation & Removal	5.00	EA			40	1,008	838	0	3,000	4,846	969.24
AD-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow one (1) day for removal of each tank.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	20.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 230	0.00 0	0.00 0	11.50 230	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	20.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 151	0.00 0	7.55 151	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	20.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 46	0.00 0	0.00 0	2.30 46	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	20.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 399	0.00 0	19.94 399	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	5.00	DAY	ULABA	0.13	10.00 50	234.30 1,172	1.45 7	34.83 174	0.00 0	270.58 1,353	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	5.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 135	0.00 0	26.95 135	26.95
HTW AA <01951 5723 > Cartridges, Respirator	40.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 1,035	0.00 0	25.87 1,035	25.87

AD-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01951 5805 > Disposal Allowance.			0.00	0.00	0.00	0.00	100.00	100.00	
Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	5.00 DAY N/A	0.00	0	0	0	0	500	500	100.00
PPEquip, Modified Class D	5.00 DAY		50	1,172	283	1,894	500	3,848	769.66
AD-10 02 05. Site Re-grading									
Allow two days for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	2.00 DAY XXQNA	0.13	28	730	254	0	0	984	492.13
Site Re-grading	2.00 DAY		28	730	254	0	0	984	492.13
TANK REMOVAL			118	2,910	1,375	1,894	3,500	9,679	
TANKS/MISC DEMOLITION & REMOVAL			118	2,910	1,375	1,894	3,500	9,679	

AD-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AD-14. THERMAL TREATMENT											
AD-14 01. INCINERATION											
AD-14 01 01. SOLIDS PREPARATION AND HANDLING											
AD-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AD-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	4.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 46	0.00 0	0.00 0	11.50 46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 30	0.00 0	7.55 30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	4.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 9	0.00 0	0.00 0	2.30 9	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	1.00	DAY	ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
PPEquip, Class D	1.00	DAY			10	234	57	92	100	483	482.91
AD-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	335.00	SY	ULABC	555.56	0.01 2	0.15 49	0.00 0	0.27 90	0.50 168	0.92 307	0.92
Plastic Cover, Excavation Area	335.00	SY			2	49	0	90	168	307	0.92

AD-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AD-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	112.00	CY	CODEG	20.00	8	227	67	0	0	294	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	112.00	CY	COEID	10.00	11	296	256	0	0	552	4.93
Excavate, haul to Incinerator	100.00	CY			20	523	323	0	0	846	8.46
AD-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	112.00	LCY		0.00	0	0	0	0	54,600	54,600	487.50
On-site Incineration	100.00	CY			0	0	0	0	54,600	54,600	546.00
AD-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	101.82	CY	CODTE	30.00	4	121	148	0	0	269	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	37.88	CY	COEID	20.00	2	50	43	143	0	236	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	37.88	CY	CODTE	30.00	2	45	55	0	0	100	2.65
Disposal, On-site	90.91	CY			8	216	247	143	0	606	6.66
On-site Incineration	100.00	CY			39	1,022	627	325	54,868	56,842	568.42

AD-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					39	1,022	627	325	54,868	56,842	
INCINERATION					39	1,022	627	325	54,868	56,842	
THERMAL TREATMENT					39	1,022	627	325	54,868	56,842	
BLDG 6652-C, Abandoned USTs (5)					157	4,413	2,002	3,027	62,468	71,910	

AE-02. MONITOR, SAMPLE, TEST, ANALYSIS

AE. Pumphouse Disposal Slope
Waste Site: Pumphouse Disposal Slope

Site Considerations:
NONE given (this is a "top" site)

Potential Remedial Activity:
Take soil samples, remove waste to OSI (30 CY given)
AE-02. MONITOR, SAMPLE, TEST, ANALYSIS

AE-02 06. SAMPLING SOIL, SED & SOLID WASTE

AE-02 06 01. SURFACE SOIL

AE-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	2.00	EA	N/A	0.00	0	0	0	0	60	60	30.00
USR AA <01954 760 > 8240, VOA - volatile organics petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	205.00	205.00	
	1.00	EA	N/A	0.00	0	0	0	0	205	205	205.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	265	907	
SURFACE SOIL					0	480	0	162	265	907	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	265	907	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	265	907	

AE-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AE-14. THERMAL TREATMENT											
AE-14 01. INCINERATION											
AE-14 01 01. SOLIDS PREPARATION AND HANDLING											
AE-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AE-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25	DAY			3	59	14	23	25	121	482.91
AE-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	100.50	SY	ULABC	555.56	0.01 1	0.15 15	0.00 0	0.27 27	0.50 50	0.92 92	0.92
Plastic Cover, Excavation Area	100.50	SY			1	15	0	27	50	92	0.92

AE-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AE-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	33.60	CY	CODEG	20.00	3	68	20	0	0	88	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	33.60	CY	COEID	10.00	3	89	77	0	0	166	4.93
Excavate, haul to Incinerator	30.00	CY			6	157	97	0	0	254	8.46
AE-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	33.60	LCY		0.00	0	0	0	0	16,380	16,380	487.50
On-site Incineration	30.00	CY			0	0	0	0	16,380	16,380	546.00
AE-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	30.55	CY	CODTE	30.00	1	36	45	0	0	81	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	11.36	CY	COEID	20.00	1	15	13	43	0	71	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	11.36	CY	CODTE	30.00	0	13	17	0	0	30	2.65
Disposal, On-site	27.27	CY			2	65	74	43	0	182	6.66
On-site Incineration	30.00	CY			11	295	185	93	16,455	17,029	567.62

AE-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					11	295	185	93	16,455	17,029	
INCINERATION					11	295	185	93	16,455	17,029	
THERMAL TREATMENT					11	295	185	93	16,455	17,029	
Pumphouse Disposal Slope					11	775	185	255	16,720	17,935	

AF-02. MONITOR, SAMPLE, TEST, ANALYSIS

AF. Pumphouse Latine, 275 Gal tank
Waste Site: Pumphouse Latrine, 275 Gal Fuel Oil Tank (tank removed)

Site Considerations:
None given (this is a "top" site)

Potential Remedial Activity:
Take soil sample, Remove waste to OSI (5 CY given)
AF-02. MONITOR, SAMPLE, TEST, ANALYSIS

AF-02 06. SAMPLING SOIL, SED & SOLID WASTE

AF-02 06 01. SURFACE SOIL

AF-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

		QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760	> 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 135	135.00 135	135.00
USR AA <01954 760	> Sample Labor - 2 men	8.00	HR	N/A	0.00	0.00 0	30.00 240	0.00 0	0.00 0	0.00 0	30.00 240	30.00
	Confirmatory Samples & Analyses					0	240	0	0	135	375	
	SURFACE SOIL					0	240	0	0	135	375	
	SAMPLING SOIL, SED & SOLID WASTE					0	240	0	0	135	375	
	MONITOR, SAMPLE, TEST, ANALYSIS					0	240	0	0	135	375	

AF-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AF-14. THERMAL TREATMENT											
AF-14 01. INCINERATION											
AF-14 01 01. SOLIDS PREPARATION AND HANDLING											
AF-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AF-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25	DAY			3	59	14	23	25	121	482.91
AF-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	16.75	SY	ULABC	555.56	0.01 0	0.15 2	0.00 0	0.27 5	0.50 8	0.92 15	0.92
Plastic Cover, Excavation Area	16.75	SY			0	2	0	5	8	15	0.92

AF-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AF-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	5.60	CY	CODEG	20.00	0	11	3	0	0	15	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	5.60	CY	COEID	10.00	1	15	13	0	0	28	4.93
Excavate, haul to Incinerator	5.00	CY			1	26	16	0	0	42	8.46
AF-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	5.60	LCY		0.00	0	0	0	0	2,730	2,730	487.50
On-site Incineration	5.00	CY			0	0	0	0	2,730	2,730	546.00
AF-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	5.09	CY	CODTE	30.00	0	6	7	0	0	13	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	1.89	CY	COEID	20.00	0	2	2	7	0	12	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	1.89	CY	CODTE	30.00	0	2	3	0	0	5	2.65
Disposal, On-site	4.55	CY			0	11	12	7	0	30	6.66
On-site Incineration	5.00	CY			4	98	43	35	2,763	2,939	587.74

AF-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					4	98	43	35	2,763	2,939	
INCINERATION					4	98	43	35	2,763	2,939	
THERMAL TREATMENT					4	98	43	35	2,763	2,939	
Pumphouse Latine, 275 Gal tank					4	338	43	35	2,898	3,314	

AG-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AG. Pumphouse Latrine, 1500 Gal tank											
Waste Site: Pumphouse Latrine, 1,500 Gal Fuel Oil Storage Tank (removed)											
Site Considerations:											
None given (this is a "top" site)											
Potential Remedial Activity:											
Take soil sample, Remove waste to OSI (5 CY given)											
AG-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AG-02 06. SAMPLING SOIL, SED & SOLID WASTE											
AG-02 06 01. SURFACE SOIL											
AG-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > 8015, TRPH, total recoverable					0.00	0.00	0.00	0.00	135.00	135.00	
petroleum hydrocarbons - mod.	2.00	EA	N/A	0.00	0	0	0	0	270	270	135.00
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	8.00	HR	N/A	0.00	0	240	0	0	0	240	30.00
Confirmatory Samples & Analyses					0	240	0	162	270	672	
SURFACE SOIL					0	240	0	162	270	672	
SAMPLING SOIL, SED & SOLID WASTE					0	240	0	162	270	672	
MONITOR, SAMPLE, TEST, ANALYSIS					0	240	0	162	270	672	

AG-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AG-14. THERMAL TREATMENT									
AG-14 01. INCINERATION									
AG-14 01 01. SOLIDS PREPARATION AND HANDLING									
AG-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.									
AG-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00 EA N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00 PR N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25 DAY ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25 DAY		3	59	14	23	25	121	482.91
AG-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.									
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	16.75 SY ULABC	555.56	0.01 0	0.15 2	0.00 0	0.27 5	0.50 8	0.92 15	0.92
Plastic Cover, Excavation Area	16.75 SY		0	2	0	5	8	15	0.92

AG-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AG-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	5.60	CY	CODEG	20.00	0	11	3	0	0	15	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	5.60	CY	COEID	10.00	1	15	13	0	0	28	4.93
Excavate, haul to Incinerator	5.00	CY			1	26	16	0	0	42	8.46
AG-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	5.60	LCY		0.00	0	0	0	0	2,730	2,730	487.50
On-site Incineration	5.00	CY			0	0	0	0	2,730	2,730	546.00
AG-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	5.09	CY	CODTE	30.00	0	6	7	0	0	13	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	1.89	CY	COEID	20.00	0	2	2	7	0	12	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	1.89	CY	CODTE	30.00	0	2	3	0	0	5	2.65
Disposal, On-site	4.55	CY			0	11	12	7	0	30	6.66
On-site Incineration	5.00	CY			4	98	43	35	2,763	2,939	587.74

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
AG. Pumphouse Latrine, 1500 Gal tank

AG-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					4	98	43	35	2,763	2,939	
INCINERATION					4	98	43	35	2,763	2,939	
THERMAL TREATMENT					4	98	43	35	2,763	2,939	
Pumphouse Latrine, 1500 Gal tank					4	338	43	196	3,033	3,610	

AH-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AH. 6652-C SSL Active Septic System											
Waste Site: 6652-C SSL, Active Septic System											
Site Considerations:											
35 x 7 x 3 (this is a "top" site)											
Potential Remedial Activity:											
Soil Gas Survey, Soil sampling, Remove Waste to OSI (27 CY given)											
AH-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AH-02 06. SAMPLING SOIL & SEDIMENT											
AH-02 06 01. SURFACE SOIL											
AH-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 8240, VOA - volatile organics petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	205.00	205.00	
	3.00	EA	N/A	0.00	0	0	0	0	615	615	205.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	615	1,257	
SURFACE SOIL					0	480	0	162	615	1,257	
AH-02 06 02. VADOSE ZONE SAMPLING, Soil Gas											
Soil Gas sampling, 4 sample points, will be done to determine level of contaminates still present. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.											
VADOSE ZONE SAMPLING, Soil Gas	4.00	EA			0	0	0	0	1,100	1,100	275.00
SAMPLING SOIL & SEDIMENT					0	480	0	162	1,715	2,357	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	1,715	2,357	

AH-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AH-14. THERMAL TREATMENT										
AH-14 01. INCINERATION										
AH-14 01 01. SOLIDS PREPARATION AND HANDLING										
AH-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.										
AH-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.										
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00 EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00 EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00 PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50 DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50 DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50 DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Class D	0.50 DAY			5	117	28	46	50	241	482.91
AH-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.										
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	90.45 SY	ULABC	555.56	0.01 1	0.15 13	0.00 0	0.27 24	0.50 45	0.92 83	0.92
Plastic Cover, Excavation Area	90.45 SY			1	13	0	24	45	83	0.92

AH-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AH-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	30.24	CY	CODEG	20.00	2	61	18	0	0	79	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	30.24	CY	COEID	10.00	3	80	69	0	0	149	4.93
Excavate, haul to Incinerator	27.00	CY			5	141	87	0	0	228	8.46
AH-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	30.24	LCY		0.00	0	0	0	0	14,742	14,742	487.50
On-site Incineration	27.00	CY			0	0	0	0	14,742	14,742	546.00
AH-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	27.49	CY	CODTE	30.00	1	33	40	0	0	73	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	10.23	CY	COEID	20.00	1	13	12	39	0	64	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	10.23	CY	CODTE	30.00	0	12	15	0	0	27	2.65
Disposal, On-site	24.55	CY			2	58	67	39	0	164	6.66
On-site Incineration	27.00	CY			13	330	182	109	14,837	15,458	572.54

AH-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING			13	330	182	109	14,837	15,458	
INCINERATION			13	330	182	109	14,837	15,458	
THERMAL TREATMENT			13	330	182	109	14,837	15,458	
6652-C SSL Active Septic System			13	810	182	271	16,552	17,815	

AI-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AI. 6652-C SSI Inactive Septic Tank											
Waste Site: 6652-C SSI, Inactive Septic Tank											
Site Considerations:											
30 x 200 x 3 (this is a "top" site)											
Potential Remedial Activity:											
Soil Gas Survey, Soil sampling, Remove waste to OSI (650 CY given)											
AI-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AI-02 06. SAMPLING SOIL & SEDIMENT											
AI-02 06 01. SURFACE SOIL											
AI-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 8240, VOA - volatile organics					0.00	0.00	0.00	0.00	205.00	205.00	
petroleum hydrocarbons - mod.	3.00	EA	N/A	0.00	0	0	0	0	615	615	205.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	615	1,257	
SURFACE SOIL					0	480	0	162	615	1,257	
AI-02 06 02. VADOSE ZONE SAMPLING, Soil Gas											
Soil Gas sampling, 8 sample points, will be done to determine level of contaminates still present. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.											
VADOSE ZONE SAMPLING, Soil Gas	8.00	EA			0	0	0	0	2,200	2,200	275.00
SAMPLING SOIL & SEDIMENT					0	480	0	162	2,815	3,457	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	2,815	3,457	

AI-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AI-14. THERMAL TREATMENT									
AI-14 01. INCINERATION									
AI-14 01 01. SOLIDS PREPARATION AND HANDLING									
AI-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.									
AI-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	17.33 EA N/A	0.00	0.00 0	0.00 0	11.50 199	0.00 0	0.00 0	11.50 199	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	17.33 EA N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 131	0.00 0	7.55 131	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	17.33 PR N/A	0.00	0.00 0	0.00 0	2.30 40	0.00 0	0.00 0	2.30 40	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	4.33 DAY ULABA	0.13	10.00 43	234.30 1,015	1.45 6	34.83 151	0.00 0	270.58 1,172	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	4.33 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 117	0.00 0	26.95 117	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	4.33 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 433	100.00 433	100.00
PPEquip, Class D	4.33 DAY		43	1,015	245	399	433	2,093	482.91
AI-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.									
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	2177.50 SY ULABC	555.56	0.01 14	0.15 321	0.00 2	0.27 587	0.50 1,089	0.92 1,999	0.92
Plastic Cover, Excavation Area	2177.50 SY		14	321	2	587	1,089	1,999	0.92

AI-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AI-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,				0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	728.00 CY	CODEG	20.00	55	1,476	435	0	0	1,911	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way				0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	728.00 CY	COEID	10.00	73	1,921	1,667	0	0	3,588	4.93
Excavate, haul to Incinerator	650.00 CY			127	3,397	2,102	0	0	5,499	8.46
AI-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils				0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	728.00 LCY		0.00	0	0	0	0	354,900	354,900	487.50
On-site Incineration	650.00 CY			0	0	0	0	354,900	354,900	546.00
AI-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	661.82 CY	CODTE	30.00	28	786	965	0	0	1,751	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way				0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	246.21 CY	COEID	20.00	12	325	282	929	0	1,536	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	246.21 CY	CODTE	30.00	10	292	359	0	0	651	2.65
Disposal, On-site	590.91 CY			50	1,403	1,606	929	0	3,938	6.66
On-site Incineration	650.00 CY			235	6,136	3,955	1,914	356,422	368,428	566.81

AI-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					235	6,136	3,955	1,914	356,422	368,428	
INCINERATION					235	6,136	3,955	1,914	356,422	368,428	
THERMAL TREATMENT					235	6,136	3,955	1,914	356,422	368,428	
6652-C SSI Inactive Septic Tank					235	6,616	3,955	2,076	359,237	371,885	

AJ-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AJ. 6652-G ALE F.S. Bldg Septic Tank											
Waste Site: 6652-G ALE Field Storage Building Septic Tank area											
Site Considerations:											
200 x 40 x 3											
Potential Remedial Activity:											
Soil Gas Surveys, Sample soil, Remove waste to OSI (890 CY given)											
AJ-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AJ-02 06. SAMPLING SOIL & SEDIMENT											
AJ-02 06 01. SURFACE SOIL											
AJ-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 8240, VOA - volatile organics petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	205.00	205.00	
	3.00	EA	N/A	0.00	0	0	0	0	615	615	205.00
USR AA <01954 760 > 8080, PCB - soil					0.00	0.00	0.00	0.00	95.00	95.00	
	4.00	EA	N/A	0.00	0	0	0	0	380	380	95.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	995	1,637	
SURFACE SOIL					0	480	0	162	995	1,637	
AJ-02 06 02. VADOSE ZONE SAMPLING, Soil Gas											
Soil Gas sampling, 8 sample points, will be done to determine level of contaminates still present. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.											
VADOSE ZONE SAMPLING, Soil Gas	8.00	EA			0.	0	0	0	2,200	2,200	275.00
SAMPLING SOIL & SEDIMENT					0	480	0	162	3,195	3,837	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	3,195	3,837	

AJ-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AJ-14. THERMAL TREATMENT										
AJ-14 01. INCINERATION										
AJ-14 01 01. SOLIDS PREPARATION AND HANDLING										
AJ-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.										
AJ-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.										
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	11.87 EA	N/A	0.00	0.00 0	0.00 0	11.50 136	0.00 0	0.00 0	11.50 136	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	11.87 EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 90	0.00 0	7.55 90	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	11.87 PR	N/A	0.00	0.00 0	0.00 0	2.30 27	0.00 0	0.00 0	2.30 27	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	2.97 DAY	ULABA	0.13	10.00 30	234.30 695	1.45 4	34.83 103	0.00 0	270.58 803	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	2.97 DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 80	0.00 0	26.95 80	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	2.97 DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 297	100.00 297	100.00
PPEquip, Class D	2.97 DAY			30	695	168	273	297	1,433	482.91
AJ-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.										
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	2981.50 SY	ULABC	555.56	0.01 19	0.15 439	0.00 3	0.27 804	0.50 1,491	0.92 2,737	0.92
Plastic Cover, Excavation Area	2981.50 SY			19	439	3	804	1,491	2,737	0.92

AJ-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AJ-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,				0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	996.80 CY	CODEG	20.00	75	2,021	595	0	0	2,617	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way				0.05	1.32	1.15	0.00	0.00	2.46	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	996.80 CY	COEID	20.00	50	1,315	1,141	0	0	2,457	2.46
Excavate, haul to Incinerator	890.00 CY			125	3,337	1,737	0	0	5,073	5.70
AJ-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils				0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	996.80 LCY		0.00	0	0	0	0	485,940	485,940	487.50
On-site Incineration	890.00 CY			0	0	0	0	485,940	485,940	546.00
AJ-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	906.18 CY	CODTE	30.00	38	1,076	1,321	0	0	2,397	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way				0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	337.12 CY	COEID	20.00	17	445	386	1,272	0	2,103	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	337.12 CY	CODTE	30.00	14	400	491	0	0	892	2.65
Disposal, On-site	809.09 CY			69	1,921	2,199	1,272	0	5,391	6.66
On-site Incineration	890.00 CY			242	6,392	4,107	2,348	487,727	500,574	562.44

AJ-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					242	6,392	4,107	2,348	487,727	500,574	
INCINERATION					242	6,392	4,107	2,348	487,727	500,574	
THERMAL TREATMENT					242	6,392	4,107	2,348	487,727	500,574	
6652-G ALE F.S. Bldg Septic Tank					242	6,872	4,107	2,510	490,922	504,411	

AK-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AK. Mound Site NW of BLDG. 6652-G											
Waste Site: Mound site NW of Building 6652-G											
Site Considerations:											
None given											
Potential Remedial Activity:											
Geophysical survey, Take soil samples, Remove waste to OSI (20 CY given)											
AK-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AK-02 06. SAMPLING SOIL, SED & SOLID WASTE											
AK-02 06 01. SURFACE SOIL											
AK-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	0	642	
SURFACE SOIL					0	480	0	162	0	642	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	0	642	
AK-02 11. GEOTECHNICAL TESTING											
AK-02 11 01. GEOTEC TESTG, Geophysical Survey											
Use Geophysical Survey (Ground penetrating radar) to define limits of mound site and determine presence of drums or other waste, based on quote from Geo Recon, Seattle (redused cost for smaller site).											
GEOTEC TESTG, Geophysical Survey					0	0	0	0	2,500	2,500	
GEOTECHNICAL TESTING					0	0	0	0	2,500	2,500	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	2,500	3,142	

AK-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AK-14. THERMAL TREATMENT									
AK-14 01. INCINERATION									
AK-14 01 01. SOLIDS PREPARATION AND HANDLING									
AK-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.									
AK-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00 EA N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00 PR N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25 DAY ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25 DAY		3	59	14	23	25	121	482.91
AK-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.									
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	67.00 SY ULABC	555.56	0.01 0	0.15 10	0.00 0	0.27 18	0.50 34	0.92 61	0.92
Plastic Cover, Excavation Area	67.00 SY		0	10	0	18	34	61	0.92

AK-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AK-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	22.40	CY	CODEG	20.00	2	45	13	0	0	59	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.05	1.32	1.15	0.00	0.00	2.46	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	22.40	CY	COEID	20.00	1	30	26	0	0	55	2.46
Excavate, haul to Incinerator	20.00	CY			3	75	39	0	0	114	5.70
AK-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	22.40	LCY		0.00	0	0	0	0	10,920	10,920	487.50
On-site Incineration	20.00	CY			0	0	0	0	10,920	10,920	546.00
AK-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	20.36	CY	CODTE	30.00	1	24	30	0	0	54	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	7.58	CY	COEID	20.00	0	10	9	29	0	47	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	7.58	CY	CODTE	30.00	0	9	11	0	0	20	2.65
Disposal, On-site	18.18	CY			2	43	49	29	0	121	6.66
On-site Incineration	20.00	CY			7	187	103	70	10,979	11,337	566.87

AK-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					7	187	103	70	10,979	11,337	
INCINERATION					7	187	103	70	10,979	11,337	
THERMAL TREATMENT					7	187	103	70	10,979	11,337	
Mound Site NW of BLDG. 6652-G					7	667	103	231	13,479	14,479	

AL-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AL. 6652-I ALE, HQTRs Septic Tank &											
Waste Site: 6652-I ALE Headquarters Septic Tank & Drainfield (6,000 Gal)											
Site Considerations:											
16 x 154 x 3; 70 x 100 x 3; 70 x 100 x 3											
Potential Remedial Activity:											
Soil Gas sampling, Soil sampling, Remove waste to OSI (1,800 CY given)											
AL-02. MONITOR, SAMPLE, TEST, ANALYSIS											
AL-02 06. SAMPLING SOIL & SEDIMENT											
AL-02 06 01. SURFACE SOIL											
AL-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze soil, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 8240, VOA - volatile organics					0.00	0.00	0.00	0.00	205.00	205.00	
petroleum hydrocarbons - mod.	3.00	EA	N/A	0.00	0	0	0	0	615	615	205.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	615	1,257	
SURFACE SOIL					0	480	0	162	615	1,257	
AL-02 06 02. VADOSE ZONE SAMPLING, Soil Gas											
Soil Gas sampling, 30 sample points, will be done to determine level of contaminates still present. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.											
VADOSE ZONE SAMPLING, Soil Gas	30.00	EA			0	0	0	0	8,250	8,250	275.00
SAMPLING SOIL & SEDIMENT					0	480	0	162	8,865	9,507	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	8,865	9,507	

AL-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AL-14. THERMAL TREATMENT									
AL-14 01. INCINERATION									
AL-14 01 01. SOLIDS PREPARATION AND HANDLING									
AL-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.									
AL-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	24.00 EA N/A	0.00	0.00 0	0.00 0	11.50 276	0.00 0	0.00 0	11.50 276	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	24.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 181	0.00 0	7.55 181	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	24.00 PR N/A	0.00	0.00 0	0.00 0	2.30 55	0.00 0	0.00 0	2.30 55	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	6.00 DAY ULABA	0.13	10.00 60	234.30 1,406	1.45 9	34.83 209	0.00 0	270.58 1,623	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	6.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 162	0.00 0	26.95 162	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	6.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 600	100.00 600	100.00
PPEquip, Class D	6.00 DAY		60	1,406	340	552	600	2,897	482.91
AL-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.									
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	6030.00 SY ULABC	555.56	0.01 38	0.15 889	0.00 6	0.27 1,625	0.50 3,015	0.92 5,535	0.92
Plastic Cover, Excavation Area	6030.00 SY		38	889	6	1,625	3,015	5,535	0.92

AL-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AL-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,				0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	2016.00 CY	CODEG	20.00	151	4,088	1,204	0	0	5,292	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way				0.05	1.32	1.15	0.00	0.00	2.46	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	2016.00 CY	COEID	20.00	101	2,660	2,309	0	0	4,969	2.46
Excavate, haul to Incinerator	1800.00 CY			252	6,748	3,513	0	0	10,261	5.70
AL-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils				0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	2016.00 LCY		0.00	0	0	0	0	982,800	982,800	487.50
On-site Incineration	1800.00 CY			0	0	0	0	982,800	982,800	546.00
AL-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	1832.73 CY	CODTE	30.00	76	2,176	2,672	0	0	4,848	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way				0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	681.82 CY	COEID	20.00	34	900	781	2,573	0	4,253	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,				0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	681.82 CY	CODTE	30.00	28	809	994	0	0	1,803	2.65
Disposal, On-site	1636.36 CY			139	3,885	4,447	2,573	0	10,904	6.66
On-site Incineration	1800.00 CY			489	12,927	8,305	4,749	986,415	1,012,397	562.44

AL-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING			489	12,927	8,305	4,749	986,415	1,012,397	
INCINERATION			489	12,927	8,305	4,749	986,415	1,012,397	
THERMAL TREATMENT			489	12,927	8,305	4,749	986,415	1,012,397	
6652-I ALE, HQTRs Septic Tank &			489	13,407	8,305	4,911	995,280	1,021,904	

AM-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

AM. Abandoned UST, 6652-, 6 tanks
Waste Site: Abandoned Under Ground Storage Tanks
6652-H 275 gal, oil
6652-H 2,000 gal, oil
6652-I 2,000 gal, fuel oil
6652-J 2,000 gal, fuel oil
6652-HI unknown vol, fuel oil
Gen. Bldg, UST, 3,000 gal, fuel oil

Site Considerations:
None given

Potential Remedial Activity:
Geophysical Survey, Sample soils, Remove USTs, and waste to OSI (120 CY)

AM-02. MONITOR, SAMPLE, TEST, ANALYSIS

AM-02 06. SAMPLING SOIL, SED & SOLID WASTE

AM-02 06 01. SURFACE SOIL

AM-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	6.00	EA	N/A	0.00	0	0	0	970	0	970	161.70
USR AA <01954 760 > 8015, TRPH - total recoverable petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	135.00	135.00	
	48.00	EA	N/A	0.00	0	0	0	0	6,480	6,480	135.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	970	6,480	7,930	
SURFACE SOIL					0	480	0	970	6,480	7,930	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	970	6,480	7,930	

AM-02 11. GEOTECHNICAL TESTING

AM-02 11 01. GEOTECH TEST, Geophysical Survey
Use Geophysical Survey (Ground penetrating radar) to define tank size and location, as well as any adjacent piping. Cost based on quote for doing several tanks at once by Geo Recon, Inc., Seattle.

GEOTECH TEST, Geophysical Survey	6.00	EA			0	0	0	0	1,680	1,680	280.00
GEOTECHNICAL TESTING					0	0	0	0	1,680	1,680	

AM-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	970	8,160	9,610	

AM-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AM-10. TANKS/MISC DEMOLITION & REMOVAL											
AM-10 02. TANK REMOVAL											
AM-10 02 01. UST Tank Excavation & Removal There are six (6) Oil & Fuel Oil storage tanks of 275 - 3,000 Gal volumes plus one unknown volume. Assume each tank is made from steel, and use average excavation quantity based on 2,000 gal tank.											
L USR AA <02220 0000 > Excavate soil around UST					0.08	2.02	1.68	0.00	0.00	3.69	
Quantity based 1,000 gal tank	600.00	CY	XXQMV	25.00	48	1,210	1,005	0	0	2,215	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk					2.00	50.42	41.89	0.00	250.00	342.31	
for disposal by Contractor. Allow 2 Hrs each tank and allow $500 for each tank for disposal	12.00	HR	XXQMV	1.00	24	605	503	0	3,000	4,108	342.31
USR AA <02220 0000 > Dispose 4,500 Gal fuel oil &					0.00	0.00	0.00	0.00	1000.00	1000.00	
1,000 Gal oil. Allow $1,000 for disposal cost and fees.	1.00	LS		0.00	0	0	0	0	1,000	1,000	1000.00
UST Tank Excavation & Removal	6.00	EA			72	1,815	1,508	0	4,000	7,323	1220.53
AM-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow five (5) days for removal of tanks.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	20.00	EA	N/A	0.00	0	0	230	0	0	230	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	20.00	EA	N/A	0.00	0	0	0	151	0	151	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	20.00	PR	N/A	0.00	0	0	46	0	0	46	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying					0.00	0.00	0.00	19.94	0.00	19.94	
Respirators	20.00	EA	N/A	0.00	0	0	0	399	0	399	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi,					10.00	234.30	1.45	34.83	0.00	270.58	
4.2 gpm, 11 HP (Daily cost) For equipment decon.	5.00	DAY	ULABA	0.13	50	1,172	7	174	0	1,353	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall					0.00	0.00	0.00	26.95	0.00	26.95	
Fans (Monthly Rental)	5.00	DAY	N/A	0.00	0	0	0	135	0	135	26.95

AM-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5723 > Cartridges, Respirator			0.00	0.00	0.00	25.87	0.00	25.87	
	40.00 EA N/A	0.00	0	0	0	1,035	0	1,035	25.87
USR AA <01951 5805 > Disposal Allowance.			0.00	0.00	0.00	0.00	100.00	100.00	
Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	5.00 DAY N/A	0.00	0	0	0	0	500	500	100.00
PPEquip, Modified Class D	5.00 DAY		50	1,172	283	1,894	500	3,848	769.66
AM-10 02 05. Site Re-grading Allow two days for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	2.00 DAY XXQNA	0.13	28	730	254	0	0	984	492.13
Site Re-grading	2.00 DAY		28	730	254	0	0	984	492.13
TANK REMOVAL			150	3,717	2,045	1,894	4,500	12,156	
TANKS/MISC DEMOLITION & REMOVAL			150	3,717	2,045	1,894	4,500	12,156	

AM-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AM-14. THERMAL TREATMENT											
AM-14 01. INCINERATION											
AM-14 01 01. SOLIDS PREPARATION AND HANDLING											
AM-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AM-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	4.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 46	0.00 0	0.00 0	11.50 46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 30	0.00 0	7.55 30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	4.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 9	0.00 0	0.00 0	2.30 9	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	1.00	DAY	ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
PPEquip, Class D	1.00	DAY			10	234	57	92	100	483	482.91
AM-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	402.00	SY	ULABC	555.56	0.01 3	0.15 59	0.00 0	0.27 108	0.50 201	0.92 369	0.92
Plastic Cover, Excavation Area	402.00	SY			3	59	0	108	201	369	0.92

AM-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AM-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	134.40 CY	CODEG	20.00	0.08 10	2.03 273	0.60 80	0.00 0	0.00 0	2.63 353	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	134.40 CY	COEID	20.00	0.05 7	1.32 177	1.15 154	0.00 0	0.00 0	2.46 331	2.46
Excavate, haul to Incinerator	120.00 CY			17	450	234	0	0	684	5.70
AM-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	134.40 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 65,520	487.50 65,520	487.50
On-site Incineration	120.00 CY			0	0	0	0	65,520	65,520	546.00
AM-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	122.18 CY	CODTE	30.00	0.04 5	1.19 145	1.46 178	0.00 0	0.00 0	2.65 323	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	45.45 CY	COEID	20.00	0.05 2	1.32 60	1.15 52	3.77 171	0.00 0	6.24 284	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	45.45 CY	CODTE	30.00	0.04 2	1.19 54	1.46 66	0.00 0	0.00 0	2.65 120	2.65
Disposal, On-site	109.09 CY			9	259	296	171	0	727	6.66
On-site Incineration	120.00 CY			39	1,002	588	372	65,821	67,783	564.86

AM-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					39	1,002	588	372	65,821	67,783	
INCINERATION					39	1,002	588	372	65,821	67,783	
THERMAL TREATMENT					39	1,002	588	372	65,821	67,783	
Abandoned UST, 6652-, 6 tanks					189	5,199	2,633	3,236	78,481	89,549	

AN-02. MONITOR, SAMPLE, TEST, ANALYSIS

AN. 6652-G UST, 2,000 Gal fuel oil
Waste Site: 6652-G UST, 2,000 Gal fuel oil

Site Considerations:
None given

Potential Remedial Activity:
Remove UST, Soil sampling, Remove waste to OSI (20 CY given)
AN-02. MONITOR, SAMPLE, TEST, ANALYSIS

AN-02 06. SAMPLING SOIL, SED & SOLID WASTE

AN-02 06 01. SURFACE SOIL

AN-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

		QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760	> TPH, In-field Test	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	161.70 162	0.00 0	161.70 162	161.70
USR AA <01954 760	> 8015, TRPH - total recoverable petroleum hydrocarbons - mod.	8.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 1,080	135.00 1,080	135.00
USR AA <01954 760	> Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
	Confirmatory Samples & Analyses					0	480	0	162	1,080	1,722	
	SURFACE SOIL					0	480	0	162	1,080	1,722	
	SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	1,080	1,722	
	MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	1,080	1,722	

AN-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AN-10. TANKS/MISC DEMOLITION & REMOVAL											
AN-10 02. TANK REMOVAL											
AN-10 02 01. UST Tank Excavation & Removal There is one (1) Fuel Oil storage tank, 2,000 Gal volume. Assume tank is made from steel, and use excavation quantity based on 2,000 gal tank.											
L USR AA <02220 0000 > Excavate soil around UST					0.08	2.02	1.68	0.00	0.00	3.69	
Quantity based 1,000 gal tank	100.00	CY	XXQMV	25.00	8	202	168	0	0	369	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk					2.00	50.42	41.89	0.00	250.00	342.31	
for disposal by Contractor. Allow 2 Hrs each tank and allow $500 for each tank for disposal	2.00	HR	XXQMV	1.00	4	101	84	0	500	685	342.31
USR AA <02220 0000 > Dispose 1,000 Gal fuel oil					0.00	0.00	0.00	0.00	500.00	500.00	
Allow $500 for disposal cost and fees.	1.00	LS		0.00	0	0	0	0	500	500	500.00
UST Tank Excavation & Removal	1.00	EA			12	303	251	0	1,000	1,554	1553.86
AN-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow one (1) day for removal of tanks.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	4.00	EA	N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	4.00	EA	N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	4.00	PR	N/A	0.00	0	0	9	0	0	9	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying					0.00	0.00	0.00	19.94	0.00	19.94	
Respirators	4.00	EA	N/A	0.00	0	0	0	80	0	80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi,					10.00	234.30	1.45	34.83	0.00	270.58	
4.2 gpm, 11 HP (Daily cost) For equipment decon.	1.00	DAY	ULABA	0.13	10	234	1	35	0	271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall					0.00	0.00	0.00	26.95	0.00	26.95	
Fans (Monthly Rental)	1.00	DAY	N/A	0.00	0	0	0	27	0	27	26.95
HTW AA <01951 5723 > Cartridges, Respirator					0.00	0.00	0.00	25.87	0.00	25.87	
	8.00	EA	N/A	0.00	0	0	0	207	0	207	25.87

AN-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01951 5805 > Disposal Allowance.			0.00	0.00	0.00	0.00	100.00	100.00	
Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00 DAY N/A	0.00	0	0	0	0	100	100	100.00
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
AN-10 02 05. Site Re-grading									
Allow two days for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	0.50 DAY XXQNA	0.13	7	183	63	0	0	246	492.13
Site Re-grading	0.50 DAY		7	183	63	0	0	246	492.13
TANK REMOVAL			29	719	371	379	1,100	2,570	
TANKS/MISC DEMOLITION & REMOVAL			29	719	371	379	1,100	2,570	

AN-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AN-14. THERMAL TREATMENT											
AN-14 01. INCINERATION											
AN-14 01 01. SOLIDS PREPARATION AND HANDLING											
AN-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AN-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25	DAY			3	59	14	23	25	121	482.91
AN-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	67.00	SY	ULABC	555.56	0.01 0	0.15 10	0.00 0	0.27 18	0.50 34	0.92 61	0.92
Plastic Cover, Excavation Area	67.00	SY			0	10	0	18	34	61	0.92

AN-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AN-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	22.40	CY	CODEG	20.00	0.08 2	2.03 45	0.60 13	0.00 0	0.00 0	2.63 59	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	22.40	CY	COEID	20.00	0.05 1	1.32 30	1.15 26	0.00 0	0.00 0	2.46 55	2.46
Excavate, haul to Incinerator	20.00	CY			3	75	39	0	0	114	5.70
AN-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	22.40	LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 10,920	487.50 10,920	487.50
On-site Incineration	20.00	CY			0	0	0	0	10,920	10,920	546.00
AN-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	20.36	CY	CODTE	30.00	0.04 1	1.19 24	1.46 30	0.00 0	0.00 0	2.65 54	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	7.58	CY	COEID	20.00	0.05 0	1.32 10	1.15 9	3.77 29	0.00 0	6.24 47	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	7.58	CY	CODTE	30.00	0.04 0	1.19 9	1.46 11	0.00 0	0.00 0	2.65 20	2.65
Disposal, On-site	18.18	CY			2	43	49	29	0	121	6.66
On-site Incineration	20.00	CY			7	187	103	70	10,979	11,337	566.87

AN-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					7	187	103	70	10,979	11,337	
INCINERATION					7	187	103	70	10,979	11,337	
THERMAL TREATMENT					7	187	103	70	10,979	11,337	
6652-G UST, 2,000 Gal fuel oil					36	1,386	474	610	13,159	15,629	

AO-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

AO. Missile Bunker sump, undrgnd fac
Waste Site: Missile Bunker Sump (Underground Facilities)

Site Considerations:
2 sumps, measuring 52' x 9'

Potential Remedial Activity:
Complete additional investigation
AO-02. MONITOR, SAMPLE, TEST, ANALYSIS

AO-02 06. SAMPLING SOIL, SED & SOLID WASTE

AO-02 06 01. SURFACE SOIL

AO-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > PCB, In-field Test			0.00	0.00	0.00	183.26	0.00	183.26	
	2.00 EA N/A	0.00	0	0	0	367	0	367	183.26
USR AA <01954 760 > 8080, PCB - soil			0.00	0.00	0.00	0.00	95.00	95.00	
	2.00 EA N/A	0.00	0	0	0	0	190	190	95.00
USR AA <01954 760 > Sample Labor - 2 men			0.00	30.00	0.00	0.00	0.00	30.00	
	8.00 HR N/A	0.00	0	240	0	0	0	240	30.00
Confirmatory Samples & Analyses			0	240	0	367	190	797	
SURFACE SOIL			0	240	0	367	190	797	
SAMPLING SOIL, SED & SOLID WASTE			0	240	0	367	190	797	

AO-02 11. GEOTECHNICAL TESTING

AO-02 11 01. GEOTEC TESTG, Geophysical Survey
Use Geophysical Survey (Ground penetrating radar) to define limits of mound site and determine presence of drums or other waste, based on quote from Geo Recon, Seattle (redused cost for smaller site).

GEOTEC TESTG, Geophysical Survey			0	0	0	0	2,500	2,500	
GEOTECHNICAL TESTING			0	0	0	0	2,500	2,500	
MONITOR, SAMPLE, TEST, ANALYSIS			0	240	0	367	2,690	3,297	
Missile Bunker sump, undrgnd fac			0	240	0	367	2,690	3,297	

AP. Missile Bunker Drainfield Active
Waste Site: Missile Bunker Drainfield Active

Site Considerations:
15 x 50 x 3

Potential Remedial Activity:
Locate w/ Geophysical survey, Take soil samples, Remove waste to OSI
(85 CY given)

AP-02. MONITOR, SAMPLE, TEST, ANALYSIS

AP-02 06. SAMPLING SOIL & SEDIMENT

AP-02 06 01. SURFACE SOIL

AP-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

AP-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	161.70 162	0.00 0	161.70 162	161.70
USR AA <01954 760 > 8240, VOA - volatile organics petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 820	205.00 820	205.00
USR AA <01954 760 > 8080, PCB - soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > 3050, Metals analysis	15.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 450	30.00 450	30.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 540	135.00 540	135.00
USR AA <01954 760 > PCB, In-field Test	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	183.26 183	0.00 0	183.26 183	183.26
USR AA <01954 760 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Confirmatory Samples & Analyses					0	480	0	345	2,190	3,015	
SURFACE SOIL					0	480	0	345	2,190	3,015	

AP-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AP-02 06 02. VADOSE ZONE SAMPLING, Soil Gas Soil Gas sampling, 3 sample points, will be done to determine level of contaminates still present. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.									
VADOSE ZONE SAMPLING, Soil Gas	3.00 EA		0	0	0	0	825	825	275.00
SAMPLING SOIL & SEDIMENT			0	480	0	345	3,015	3,840	
AP-02 11. GEOTECHNICAL TESTING									
AP-02 11 01. GEOTEC TESTG, Geophysical Survey Use Geophysical Survey (Ground penetrating radar) to define limits of drainfield site and determine presence of any other waste, based on quote from Geo Recon, Seattle (redused cost for smaller site).									
GEOTEC TESTG, Geophysical Survey			0	0	0	0	2,500	2,500	
GEOTECHNICAL TESTING			0	0	0	0	2,500	2,500	
MONITOR, SAMPLE, TEST, ANALYSIS			0	480	0	345	5,515	6,340	

AP-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AP-14. THERMAL TREATMENT											
AP-14 01. INCINERATION											
AP-14 01 01. SOLIDS PREPARATION AND HANDLING											
AP-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AP-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	2.00	EA	N/A	0.00	0	0	23	0	0	23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	2.00	EA	N/A	0.00	0	0	0	15	0	15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	2.00	PR	N/A	0.00	0	0	5	0	0	5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Class D	0.50	DAY			5	117	28	46	50	241	482.91
AP-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	284.75	SY	ULABC	555.56	0.01 2	0.15 42	0.00 0	0.27 77	0.50 142	0.92 261	0.92
Plastic Cover, Excavation Area	284.75	SY			2	42	0	77	142	261	0.92

AP-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AP-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	95.20 CY	CODEG	20.00	0.08 7	2.03 193	0.60 57	0.00 0	0.00 0	2.63 250	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	95.20 CY	COEID	20.00	0.05 5	1.32 126	1.15 109	0.00 0	0.00 0	2.46 235	2.46
Excavate, haul to Incinerator	85.00 CY			12	319	166	0	0	485	5.70
AP-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	95.20 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 46,410	487.50 46,410	487.50
On-site Incineration	85.00 CY			0	0	0	0	46,410	46,410	546.00
AP-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	86.55 CY	CODTE	30.00	0.04 4	1.19 103	1.46 126	0.00 0	0.00 0	2.65 229	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	32.20 CY	COEID	20.00	0.05 2	1.32 42	1.15 37	3.77 121	0.00 0	6.24 201	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	32.20 CY	CODTE	30.00	0.04 1	1.19 38	1.46 47	0.00 0	0.00 0	2.65 85	2.65
Disposal, On-site	77.27 CY			7	183	210	121	0	515	6.66
On-site Incineration	85.00 CY			25	661	404	244	46,602	47,912	563.67

AP-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					25	661	404	244	46,602	47,912	
INCINERATION					25	661	404	244	46,602	47,912	
THERMAL TREATMENT					25	661	404	244	46,602	47,912	
Missile Bunker Drainfield Active					25	1,141	404	589	52,117	54,252	

AQ. Main Entrance Stained Soil
Waste Site: Main Entrance Stained Soil

Site Considerations:
18' x 15' x 3 '

Potential Remedial Activity:
Take soil samples, Remove waste to OSI (30 YD given)
AQ-02. MONITOR, SAMPLE, TEST, ANALYSIS

AQ-02 06. SAMPLING SOIL & SEDIMENT

AQ-02 06 01. SURFACE SOIL

AQ-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

AQ-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 8270, BNA - Base neutral acid					0.00	0.00	0.00	0.00	360.00	360.00	
	4.00	EA	N/A	0.00	0	0	0	0	1,440	1,440	360.00
USR AA <01954 760 > 8080, PCB - soil					0.00	0.00	0.00	0.00	95.00	95.00	
	1.00	EA	N/A	0.00	0	0	0	0	95	95	95.00
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	10.00	EA	N/A	0.00	0	0	0	0	300	300	30.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	135.00	135.00	
	1.00	EA	N/A	0.00	0	0	0	0	135	135	135.00
USR AA <01954 760 > PCB, In-field Test					0.00	0.00	0.00	183.26	0.00	183.26	
	1.00	EA	N/A	0.00	0	0	0	183	0	183	183.26
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	345	1,970	2,795	
SURFACE SOIL					0	480	0	345	1,970	2,795	
SAMPLING SOIL & SEDIMENT					0	480	0	345	1,970	2,795	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	345	1,970	2,795	

AQ-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AQ-14. THERMAL TREATMENT											
AQ-14 01. INCINERATION											
AQ-14 01 01. SOLIDS PREPARATION AND HANDLING											
AQ-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AQ-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	1.00	EA	N/A	0.00	0	0	12	0	0	12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	1.00	EA	N/A	0.00	0	0	0	8	0	8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	1.00	PR	N/A	0.00	0	0	2	0	0	2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)					10.00	234.30	1.45	34.83	0.00	270.58	
	0.25	DAY	ULABA	0.13	3	59	0	9	0	68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)					0.00	0.00	0.00	26.95	0.00	26.95	
	0.25	DAY	N/A	0.00	0	0	0	7	0	7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.					0.00	0.00	0.00	0.00	100.00	100.00	
	0.25	DAY	N/A	0.00	0	0	0	0	25	25	100.00
PPEquip, Class D	0.25	DAY			3	59	14	23	25	121	482.91
AQ-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.					0.01	0.15	0.00	0.27	0.50	0.92	
	100.50	SY	ULABC	555.56	1	15	0	27	50	92	0.92
Plastic Cover, Excavation Area	100.50	SY			1	15	0	27	50	92	0.92

AQ-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AQ-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	33.60 CY	CODEG	20.00	0.08 3	2.03 68	0.60 20	0.00 0	0.00 0	2.63 88	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	33.60 CY	COEID	20.00	0.05 2	1.32 44	1.15 38	0.00 0	0.00 0	2.46 83	2.46
Excavate, haul to Incinerator	30.00 CY			4	112	59	0	0	171	5.70
AQ-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	33.60 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 16,380	487.50 16,380	487.50
On-site Incineration	30.00 CY			0	0	0	0	16,380	16,380	546.00
AQ-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	30.55 CY	CODTE	30.00	0.04 1	1.19 36	1.46 45	0.00 0	0.00 0	2.65 81	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	11.36 CY	COEID	20.00	0.05 1	1.32 15	1.15 13	3.77 43	0.00 0	6.24 71	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	11.36 CY	CODTE	30.00	0.04 0	1.19 13	1.46 17	0.00 0	0.00 0	2.65 30	2.65
Disposal, On-site	27.27 CY			2	65	74	43	0	182	6.66
On-site Incineration	30.00 CY			10	251	147	93	16,455	16,946	564.86

AQ-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					10	251	147	93	16,455	16,946	
INCINERATION					10	251	147	93	16,455	16,946	
THERMAL TREATMENT					10	251	147	93	16,455	16,946	
Main Entrance Stained Soil					10	731	147	438	18,425	19,741	

AR-02. MONITOR, SAMPLE, TEST, ANALYSIS

AR. Missile Bunker Discharge Ditch
Waste Site: Missile Bunker Discharge Ditch

Site Considerations:
two rock ditchs, 70' x 10' x 3'

Potential Remedial Activity:
Take soil samples, Remove waste to OSI (80 CY given)
AR-02. MONITOR, SAMPLE, TEST, ANALYSIS

AR-02 06. SAMPLING SOIL & SEDIMENT

AR-02 06 01. SURFACE SOIL

AR-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

		QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 >	TPH, In-field Test	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	161.70 323	0.00 0	161.70 323	161.70
USR AA <01954 760 >	8240, VOA - volatile organics	10.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 2,050	205.00 2,050	205.00
USR AA <01954 760 >	8080, PCB - soil	5.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 475	95.00 475	95.00
USR AA <01954 760 >	8015, TRPH, total recoverable petroleum hydrocarbons - mod.	5.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 675	135.00 675	135.00
USR AA <01954 760 >	PCB, In-field Test	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	183.26 367	0.00 0	183.26 367	183.26
USR AA <01954 760 >	Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
	Confirmatory Samples & Analyses					0	480	0	690	3,200	4,370	
	SURFACE SOIL					0	480	0	690	3,200	4,370	
	SAMPLING SOIL & SEDIMENT					0	480	0	690	3,200	4,370	
	MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	690	3,200	4,370	

AR-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AR-14. THERMAL TREATMENT											
AR-14 01. INCINERATION											
AR-14 01 01. SOLIDS PREPARATION AND HANDLING											
AR-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AR-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	2.00	EA	N/A	0.00	0	0	23	0	0	23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	2.00	EA	N/A	0.00	0	0	0	15	0	15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	2.00	PR	N/A	0.00	0	0	5	0	0	5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)					10.00	234.30	1.45	34.83	0.00	270.58	
	0.50	DAY	ULABA	0.13	5	117	1	17	0	135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)					0.00	0.00	0.00	26.95	0.00	26.95	
	0.50	DAY	N/A	0.00	0	0	0	13	0	13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.					0.00	0.00	0.00	0.00	100.00	100.00	
	0.50	DAY	N/A	0.00	0	0	0	0	50	50	100.00
PPEquip, Class D	0.50	DAY			5	117	28	46	50	241	482.91
AR-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.					0.01	0.15	0.00	0.27	0.50	0.92	
	268.00	SY	ULABC	555.56	2	40	0	72	134	246	0.92
Plastic Cover, Excavation Area	268.00	SY			2	40	0	72	134	246	0.92

AR-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AR-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	89.60	CY	CODEG	20.00	0.08 7	2.03 182	0.60 54	0.00 0	0.00 0	2.63 235	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	89.60	CY	COEID	20.00	0.05 4	1.32 118	1.15 103	0.00 0	0.00 0	2.46 221	2.46
Excavate, haul to Incinerator	80.00	CY			11	300	156	0	0	456	5.70
AR-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	89.60	LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 43,680	487.50 43,680	487.50
On-site Incineration	80.00	CY			0	0	0	0	43,680	43,680	546.00
AR-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	81.45	CY	CODTE	30.00	0.04 3	1.19 97	1.46 119	0.00 0	0.00 0	2.65 215	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	30.30	CY	COEID	20.00	0.05 2	1.32 40	1.15 35	3.77 114	0.00 0	6.24 189	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	30.30	CY	CODTE	30.00	0.04 1	1.19 36	1.46 44	0.00 0	0.00 0	2.65 80	2.65
Disposal, On-site	72.73	CY			6	173	198	114	0	485	6.66
On-site Incineration	80.00	CY			24	629	382	233	43,864	45,108	563.85

AR-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					24	629	382	233	43,864	45,108	
INCINERATION					24	629	382	233	43,864	45,108	
THERMAL TREATMENT					24	629	382	233	43,864	45,108	
Missile Bunker Discharge Ditch					24	1,109	382	922	47,064	49,478	

AS-02. MONITOR, SAMPLE, TEST, ANALYSIS

AS. JP4 Fuel Pad
Waste Site: JP4 Fuel Pad

Site Considerations:
None given

Potential Remedial Activity:
Take soil samples, Remove waste to OSI (9 CY given)
AS-02. MONITOR, SAMPLE, TEST, ANALYSIS

AS-02 06. SAMPLING SOIL, SED & SOLID WASTE

AS-02 06 01. SURFACE SOIL

AS-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

		QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760	> TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
		1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760	> Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
		16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
	Confirmatory Samples & Analyses					0	480	0	162	0	642	
	SURFACE SOIL					0	480	0	162	0	642	
	SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	0	642	
	MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	0	642	

AS-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AS-14. THERMAL TREATMENT											
AS-14 01. INCINERATION											
AS-14 01 01. SOLIDS PREPARATION AND HANDLING											
AS-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AS-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25	DAY			3	59	14	23	25	121	482.91
AS-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	30.15	SY	ULABC	555.56	0.01 0	0.15 4	0.00 0	0.27 8	0.50 15	0.92 28	0.92
Plastic Cover, Excavation Area	30.15	SY			0	4	0	8	15	28	0.92

AS-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AS-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	10.08 CY	CODEG	20.00	0.08 1	2.03 20	0.60 6	0.00 0	0.00 0	2.63 26	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	10.08 CY	COEID	20.00	0.05 1	1.32 13	1.15 12	0.00 0	0.00 0	2.46 25	2.46
Excavate, haul to Incinerator	9.00 CY			1	34	18	0	0	51	5.70
AS-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	10.08 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 4,914	487.50 4,914	487.50
On-site Incineration	9.00 CY			0	0	0	0	4,914	4,914	546.00
AS-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	9.16 CY	CODTE	30.00	0.04 0	1.19 11	1.46 13	0.00 0	0.00 0	2.65 24	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	3.41 CY	COEID	20.00	0.05 0	1.32 4	1.15 4	3.77 13	0.00 0	6.24 21	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	3.41 CY	CODTE	30.00	0.04 0	1.19 4	1.46 5	0.00 0	0.00 0	2.65 9	2.65
Disposal, On-site	8.18 CY			1	19	22	13	0	55	6.66
On-site Incineration	9.00 CY			5	116	54	44	4,954	5,168	574.25

AS-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					5	116	54	44	4,954	5,168	
INCINERATION					5	116	54	44	4,954	5,168	
THERMAL TREATMENT					5	116	54	44	4,954	5,168	
JP4 Fuel Pad					5	596	54	206	4,954	5,810	

AT-02. MONITOR, SAMPLE, TEST, ANALYSIS

AT. NIKE BASE LANDFILL
Waste Site: NIKE Base Landfill

Site Considerations:
1.5 Acre site

Potential Remedial Activity:
Soil Gas, Soil Sampling, Geophysical Survey, Confirmatory Sampling
AT-02. MONITOR, SAMPLE, TEST, ANALYSIS

AT-02 06. SAMPLING SOIL, SED & SOLID WASTE

AT-02 06 01. SURFACE SOIL

AT-02 06 01 01. Soil Samples & Analyses
Sample & analyze soil. Analyses cost given in detail.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > 8240, VOA - volatile organics	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 820	205.00 820	205.00
USR AA <01954 760 > 8080, PCB - soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 540	135.00 540	135.00
USR AA <01954 760 > 8270, BNA - Base neutral acid	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	360.00 1,440	360.00 1,440	360.00
USR AA <01954 760 > 3050, Metals analysis	20.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 600	30.00 600	30.00
USR AA <01954 760 > 8150, Chlorinated herbicides	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	110.00 440	110.00 440	110.00
USR AA <01954 760 > pH	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	15.00 60	15.00 60	15.00
USR AA <01954 760 > Asbestos soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	75.00 300	75.00 300	75.00
USR AA <01954 760 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Soil Samples & Analyses					0	480	0	0	4,580	5,060	
SURFACE SOIL					0	480	0	0	4,580	5,060	

AT-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AT-02 06 02. VADOSE ZONE SAMPLING, Soil Gas Soil Gas sampling, 30 sample points, will be done to determine if any contaminates still present. Remedial action will be determined by results of surveys at the site. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.									
VADOSE ZONE SAMPLING, Soil Gas	30.00 EA		0	0	0	0	8,250	8,250	275.00
AT-02 06 91. TEST PIT									
L USR AA <02220 0000 > Excavate Test Pit (3'W x 6'D)			0.20	5.04	4.19	0.00	0.00	9.23	
Assume pit 25' L, say: 20 CY.	20.00 CY XXQMV	10.00	4	101	84	0	0	185	9.23
TEST PIT			4	101	84	0	0	185	
SAMPLING SOIL, SED & SOLID WASTE			4	581	84	0	12,830	13,495	
AT-02 11. GEOTECHNICAL TESTING									
AT-02 11 01. GEOTEC TESTG, Geophysical Survey Use Geophysical Survey (Ground penetrating radar) to define limits of landfill and determine presence of drums or other waste, based on quote from Geo Recon, Seattle.									
GEOTEC TESTG, Geophysical Survey			0	0	0	0	3,500	3,500	
GEOTECHNICAL TESTING			0	0	0	0	3,500	3,500	
MONITOR, SAMPLE, TEST, ANALYSIS			4	581	84	0	16,330	16,995	
NIKE BASE LANDFILL			4	581	84	0	16,330	16,995	

AU-02. MONITOR, SAMPLE, TEST, ANALYSIS

AU. Missile Bunker Landfill
Waste Site: Missile Bunker Landfill

Site Considerations:
1.25 Acre site

Potential Remedial Activity:
Soil Gas, Soil Samples, Geophysical Survey, Confirmatory Sampling
AU-02. MONITOR, SAMPLE, TEST, ANALYSIS

AU-02 06. SAMPLING SOIL, SED & SOLID WASTE

AU-02 06 01. SURFACE SOIL

AU-02 06 01 01. Soil Samples & Analyses
Sample & analyze soil. Analyses cost given in detail.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > 8240, VOA - volatile organics	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 820	205.00 820	205.00
USR AA <01954 760 > 8080, PCB - soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 540	135.00 540	135.00
USR AA <01954 760 > 8270, BNA - Base neutral acid	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	360.00 1,440	360.00 1,440	360.00
USR AA <01954 760 > 3050, Metals analysis	20.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 600	30.00 600	30.00
USR AA <01954 760 > 8150, Chlorinated herbicides	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	110.00 440	110.00 440	110.00
USR AA <01954 760 > pH	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	15.00 60	15.00 60	15.00
USR AA <01954 760 > Asbestos soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	75.00 300	75.00 300	75.00
USR AA <01954 760 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Soil Samples & Analyses					0	480	0	0	4,580	5,060	
SURFACE SOIL					0	480	0	0	4,580	5,060	

AU-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AU-02 06 02. VADOSE ZONE SAMPLING, Soil Gas Soil Gas sampling, 30 sample points, will be done to determine if any contaminates still present. Remedial action will be determined by results of surveys at the site. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.									
VADOSE ZONE SAMPLING, Soil Gas	30.00 EA		0	0	0	0	8,250	8,250	275.00
AU-02 06 91. TEST PIT									
L USR AA <02220 0000 > Excavate Test Pit (3'W x 6'D)			0.20	5.04	4.19	0.00	0.00	9.23	
Assume pit 25' L, say: 20 CY.	20.00 CY XXQMV	10.00	4	101	84	0	0	185	9.23
TEST PIT			4	101	84	0	0	185	
SAMPLING SOIL, SED & SOLID WASTE			4	581	84	0	12,830	13,495	
AU-02 11. GEOTECHNICAL TESTING									
AU-02 11 01. GEOTEC TESTG, Geophysical Survey Use Geophysical Survey (Ground penetrating radar) to define limits of landfill and determine presence of drums or other waste, based on quote from Geo Recon, Seattle.									
GEOTEC TESTG, Geophysical Survey			0	0	0	0	3,500	3,500	
GEOTECHNICAL TESTING			0	0	0	0	3,500	3,500	
MONITOR, SAMPLE, TEST, ANALYSIS			4	581	84	0	16,330	16,995	
Missile Bunker Landfill			4	581	84	0	16,330	16,995	

AV-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

AV. Missile Refueling Area Berm
Waste Site: Missile Refueling Area Berm

Site Considerations:
Remove 1 foot soil

Potential Remedial Activity:
Soil sampling, Remove waste to TSDF (600 CY given)
AV-02. MONITOR, SAMPLE, TEST, ANALYSIS

AV-02 06. SAMPLING SOIL, SED & SOLID WASTE

AV-02 06 01. SURFACE SOIL

AV-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > 8150, Chlorinated herbicides	12.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	107.00 1,284	107.00 1,284	107.00
USR AA <01954 760 > Sample Labor - 2 men	8.00 HR N/A	0.00	0.00 0	30.00 240	0.00 0	0.00 0	0.00 0	30.00 240	30.00
Confirmatory Samples & Analyses			0	240	0	0	1,284	1,524	
SURFACE SOIL			0	240	0	0	1,284	1,524	
SAMPLING SOIL, SED & SOLID WASTE			0	240	0	0	1,284	1,524	
MONITOR, SAMPLE, TEST, ANALYSIS			0	240	0	0	1,284	1,524	

AV-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AV-14. THERMAL TREATMENT											
AV-14 01. INCINERATION											
AV-14 01 01. SOLIDS PREPARATION AND HANDLING											
AV-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AV-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	8.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 92	0.00 0	0.00 0	11.50 92	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	8.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 60	0.00 0	7.55 60	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	8.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 18	0.00 0	0.00 0	2.30 18	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	2.00	DAY	ULABA	0.13	10.00 20	234.30 469	1.45 3	34.83 70	0.00 0	270.58 541	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	2.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 54	0.00 0	26.95 54	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	2.00	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 200	100.00 200	100.00
PPEquip, Class D	2.00	DAY			20	469	113	184	200	966	482.91
AV-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	2010.00	SY	ULABC	555.56	0.01 13	0.15 296	0.00 2	0.27 542	0.50 1,005	0.92 1,845	0.92
Plastic Cover, Excavation Area	2010.00	SY			13	296	2	542	1,005	1,845	0.92

AV-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AV-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	672.00	CY	CODEG	20.00	50	1,363	401	0	0	1,764	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.05	1.32	1.15	0.00	0.00	2.46	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	672.00	CY	COEID	20.00	34	887	770	0	0	1,656	2.46
Excavate, haul to Incinerator	600.00	CY			84	2,249	1,171	0	0	3,420	5.70
AV-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	672.00	LCY		0.00	0	0	0	0	327,600	327,600	487.50
On-site Incineration	600.00	CY			0	0	0	0	327,600	327,600	546.00
AV-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	610.91	CY	CODTE	30.00	25	725	891	0	0	1,616	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	227.27	CY	COEID	20.00	11	300	260	857	0	1,418	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	227.27	CY	CODTE	30.00	9	270	331	0	0	601	2.65
Disposal, On-site	545.45	CY			46	1,295	1,482	857	0	3,635	6.66
On-site Incineration	600.00	CY			163	4,309	2,768	1,583	328,805	337,466	562.44

AV-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					163	4,309	2,768	1,583	328,805	337,466	
INCINERATION					163	4,309	2,768	1,583	328,805	337,466	
THERMAL TREATMENT					163	4,309	2,768	1,583	328,805	337,466	
Missile Refueling Area Berm					163	4,549	2,768	1,583	330,089	338,990	

AW-02. MONITOR, SAMPLE, TEST, ANALYSIS

AW. Acid Neutralization Pit
Waste Site: Acid Neutralization Pit

Site Considerations:
40 x 5 x 3

Potential Remedial Activity:
Soil Sampling, Remove waste to TSDF (20 CY given)
AW-02. MONITOR, SAMPLE, TEST, ANALYSIS

AW-02 06. SAMPLING SOIL, SED & SOLID WASTE

AW-02 06 01. SURFACE SOIL

AW-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > pH					0.00	0.00	0.00	0.00	15.00	15.00	
	2.00	EA	N/A	0.00	0	0	0	0	30	30	15.00
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	10.00	EA	N/A	0.00	0	0	0	0	300	300	30.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	0	330	810	
SURFACE SOIL					0	480	0	0	330	810	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	0	330	810	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	0	330	810	

AW-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AW-08. SOLIDS COLLECTION & CONTAINMENT										
AW-08 01. EXCAVATION										
AW-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.										
L USR AA <02220 0000 > Excavate con. soil & Waste				0.08	2.02	1.68	0.00	0.00	3.69	
Use a 1.1 swell factor.	22.00 CY	XXQMV	25.00	2	44	37	0	0	81	3.69
USR AA <02220 0000 > Load excavated soil & conc pad				0.03	0.68	1.46	0.00	0.00	2.13	
Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	22.00 CY	XXQMG	40.00	1	15	32	0	0	47	2.13
Excav/Load Cont. Soil & Waste	20.00 CY			2	59	69	0	0	128	6.41
AW-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.										
USR AA <02220 0000 > Transport soil to Arlington, OR				0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	2.00 TRK		0.00	0	0	0	0	800	800	400.00
USR AA <02220 0000 > Disposal of soil in landfill				0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	34.10 TON		0.00	0	0	0	0	4,569	4,569	134.00
USR AA <02220 0000 > Oregon state environmental tax				0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	34.10 TON		0.00	0	0	0	0	1,023	1,023	30.00
USR AA <02220 0000 > Soil profile fee				0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00 EA		0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	20.00 CY			0	0	0	0	6,692	6,692	334.62
AW-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.										
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)				0.00	0.00	11.50	0.00	0.00	11.50	
	4.00 EA	N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek				0.00	0.00	0.00	7.55	0.00	7.55	
	4.00 EA	N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves				0.00	0.00	2.30	0.00	0.00	2.30	
	4.00 PR	N/A	0.00	0	0	9	0	0	9	2.30

AW-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators			0.00	0.00	0.00	19.94	0.00	19.94	
	4.00 EA N/A	0.00	0	0	0	80	0	80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.			10.00	234.30	1.45	34.83	0.00	270.58	
	1.00 DAY ULABA	0.13	10	234	1	35	0	271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)			0.00	0.00	0.00	26.95	0.00	26.95	
	1.00 DAY N/A	0.00	0	0	0	27	0	27	26.95
HTW AA <01951 5723 > Cartridges, Respirator			0.00	0.00	0.00	25.87	0.00	25.87	
	8.00 EA N/A	0.00	0	0	0	207	0	207	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.			0.00	0.00	0.00	0.00	100.00	100.00	
	1.00 DAY N/A	0.00	0	0	0	0	100	100	100.00
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
AW-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	0.50 DAY XXQNA	0.13	7	183	63	0	0	246	492.13
Site Re-grading	0.50 DAY		7	183	63	0	0	246	492.13
EXCAVATION			19	476	189	379	6,792	7,836	
SOLIDS COLLECTION & CONTAINMENT			19	476	189	379	6,792	7,836	
Acid Neutralization Pit			19	956	189	379	7,122	8,646	

AX. Missile Refueling JP-4 Fuel Area
Waste Site: Missile Refueling JP-4 Fuel Area

Site Considerations:
20 x 20 x 3

Potential Remedial Activity:
Soil Sampling, Remove waste to OSI (45 CY given)
AX-02. MONITOR, SAMPLE, TEST, ANALYSIS

AX-02 06. SAMPLING SOIL, SED & SOLID WASTE

AX-02 06 01. SURFACE SOIL

AX-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

AX-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	0	642	
SURFACE SOIL					0	480	0	162	0	642	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	0	642	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	0	642	

AX-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AX-14. THERMAL TREATMENT											
AX-14 01. INCINERATION											
AX-14 01 01. SOLIDS PREPARATION AND HANDLING											
AX-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AX-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Class D	0.50	DAY			5	117	28	46	50	241	482.91
AX-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	150.75	SY	ULABC	555.56	0.01 1	0.15 22	0.00 0	0.27 41	0.50 75	0.92 138	0.92
Plastic Cover, Excavation Area	150.75	SY			1	22	0	41	75	138	0.92

AX-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AX-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	50.40	CY	CODEG	20.00	4	102	30	0	0	132	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	50.40	CY	COEID	10.00	5	133	115	0	0	248	4.93
Excavate, haul to Incinerator	45.00	CY			9	235	146	0	0	381	8.46
AX-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	50.40	LCY		0.00	0	0	0	0	24,570	24,570	487.50
On-site Incineration	45.00	CY			0	0	0	0	24,570	24,570	546.00
AX-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	45.82	CY	CODTE	30.00	2	54	67	0	0	121	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	17.05	CY	COEID	20.00	1	22	20	64	0	106	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	17.05	CY	CODTE	30.00	1	20	25	0	0	45	2.65
Disposal, On-site	40.91	CY			3	97	111	64	0	273	6.66
On-site Incineration	45.00	CY			18	472	285	151	24,695	25,603	568.96

AX-14. THERMAL TREATMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING			18	472	285	151	24,695	25,603	
INCINERATION			18	472	285	151	24,695	25,603	
THERMAL TREATMENT			18	472	285	151	24,695	25,603	
Missile Refueling JP-4 Fuel Area			18	952	285	313	24,695	26,245	

AY. M.M. & A.A., Inactive Septic Sys
Waste Site: Missile Maintenance & Assembly Area, Inactive Septic System

Site Considerations:
70 x 20 x 3

Potential Remedial Action:
Soil Gas & Geophysical Surveys, Soil Sampling, Remove waste to OSI
(155 CY given)

AY-02. MONITOR, SAMPLE, TEST, ANALYSIS

AY-02 06. SAMPLING SOIL, SED & SOLID WASTE

AY-02 06 01. SURFACE SOIL

AY-02 06 01 01. Soil Samples & Analyses
Sample & analyze soil. Analyses cost given in detail.

AY-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > 8240, VOA - volatile organics	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 820	205.00 820	205.00
USR AA <01954 760 > 8080, PCB - soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 540	135.00 540	135.00
USR AA <01954 760 > TPH, In-field Test	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	161.70 162	0.00 0	161.70 162	161.70
USR AA <01954 760 > 3050, Metals analysis	12.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 360	30.00 360	30.00
USR AA <01954 760 > PCB, In-field Test	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	183.26 183	0.00 0	183.26 183	183.26
USR AA <01954 760 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Soil Samples & Analyses					0	480	0	345	2,100	2,925	
SURFACE SOIL					0	480	0	345	2,100	2,925	

AY-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AY-02 06 02. VADOSE ZONE SAMPLING, Soil Gas Soil Gas sampling, 3 sample points, will be done to determine if any contaminates still present. Remedial action will be determined by results of surveys at the site. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.									
VADOSE ZONE SAMPLING, Soil Gas	3.00 EA		0	0	0	0	825	825	275.00
SAMPLING SOIL, SED & SOLID WASTE			0	480	0	345	2,925	3,750	
AY-02 11. GEOTECHNICAL TESTING									
AY-02 11 01. GEOTEC TESTG, Geophysical Survey Use Geophysical Survey (Ground penetrating radar) to define limits of landfill and determine presence of drums or other waste, based on quote from Geo Recon, Inc., Seattle. Using reduced cost for smaller area.									
GEOTEC TESTG, Geophysical Survey			0	0	0	0	2,500	2,500	
GEOTECHNICAL TESTING			0	0	0	0	2,500	2,500	
MONITOR, SAMPLE, TEST, ANALYSIS			0	480	0	345	5,425	6,250	

AY-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AY-14. THERMAL TREATMENT											
AY-14 01. INCINERATION											
AY-14 01 01. SOLIDS PREPARATION AND HANDLING											
AY-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AY-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Class D	0.50	DAY			5	117	28	46	50	241	482.91
AY-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	519.25	SY	ULABC	555.56	0.01 3	0.15 77	0.00 1	0.27 140	0.50 260	0.92 477	0.92
Plastic Cover, Excavation Area	519.25	SY			3	77	1	140	260	477	0.92

AY-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AY-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	173.60	CY	CODEG	20.00	0.08 13	2.03 352	0.60 104	0.00 0	0.00 0	2.63 456	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	173.60	CY	COEID	20.00	0.05 9	1.32 229	1.15 199	0.00 0	0.00 0	2.46 428	2.46
Excavate, haul to Incinerator	155.00	CY			22	581	302	0	0	884	5.70
AY-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	173.60	LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 84,630	487.50 84,630	487.50
On-site Incineration	155.00	CY			0	0	0	0	84,630	84,630	546.00
AY-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	157.82	CY	CODTE	30.00	0.04 7	1.19 187	1.46 230	0.00 0	0.00 0	2.65 417	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	58.71	CY	COEID	20.00	0.05 3	1.32 77	1.15 67	3.77 222	0.00 0	6.24 366	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	58.71	CY	CODTE	30.00	0.04 2	1.19 70	1.46 86	0.00 0	0.00 0	2.65 155	2.65
Disposal, On-site	140.91	CY			12	335	383	222	0	939	6.66
On-site Incineration	155.00	CY			42	1,109	714	407	84,940	87,171	562.39

AY-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					42	1,109	714	407	84,940	87,171	
INCINERATION					42	1,109	714	407	84,940	87,171	
THERMAL TREATMENT					42	1,109	714	407	84,940	87,171	
M.M. & A.A., Inactive Septic Sys					42	1,589	714	752	90,365	93,421	

AZ-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

AZ. M.M. & A.A.,275Gal fuel oil Tank
Waste Site: Missile Maintenance & Assembly Area, 275 Gal Fuel Oil Tank

Site Considerations:
None given

Potential Remedial Activity:
Soil sampling, Remove tank & waste (20 CY to OSI)
AZ-02. MONITOR, SAMPLE, TEST, ANALYSIS

AZ-02 06. SAMPLING SOIL, SED & SOLID WASTE

AZ-02 06 01. SURFACE SOIL

AZ-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	8.00	HR	N/A	0.00	0	240	0	0	0	240	30.00
Confirmatory Samples & Analyses					0	240	0	162	0	402	
SURFACE SOIL					0	240	0	162	0	402	
SAMPLING SOIL, SED & SOLID WASTE					0	240	0	162	0	402	
MONITOR, SAMPLE, TEST, ANALYSIS					0	240	0	162	0	402	

AZ-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AZ-10. TANKS/MISC DEMOLITION & REMOVAL											
AZ-10 02. TANK REMOVAL											
AZ-10 02 01. UST Tank Excavation & Removal There is one (1) Fuel Oil storage tank, 275 Gal volume. Assume tank is made from steel, and use excavation quantity based on 500 gal tank.											
L USR AA <02220 0000 > Excavate soil around UST Quantity based 1,000 gal tank	25.00	CY	XXQMV	25.00	0.08 2	2.02 50	1.68 42	0.00 0	0.00 0	3.69 92	3.69
L USR AA <02220 0000 > Remove & Load UST to Flatbed Trk for disposal by Contractor. Allow 1 Hr each tank and allow $250 for each tank for disposal	1.00	HR	XXQMV	1.00	2.00 2	50.42 50	41.89 42	0.00 0	250.00 250	342.31 342	342.31
USR AA <02220 0000 > Dispose 135 Gal fuel oil Allow $250 for disposal cost and fees.	1.00	LS		0.00	0.00 0	0.00 0	0.00 0	0.00 0	250.00 250	250.00 250	250.00
UST Tank Excavation & Removal	1.00	EA			4	101	84	0	500	685	684.62
AZ-10 02 04. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal. Allow 1/2 day for removal of small tank.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 40	0.00 0	19.94 40	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
HTW AA <01951 5723 > Cartridges, Respirator	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 103	0.00 0	25.87 103	25.87

AZ-10. TANKS/MISC DEMOLITION & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01951 5805 > Disposal Allowance.			0.00	0.00	0.00	0.00	100.00	100.00	
Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50 DAY N/A	0.00	0	0	0	0	50	50	100.00
PPEquip, Modified Class D	0.50 DAY		5	117	28	189	50	385	769.66
AZ-10 02 05. Site Re-grading									
Allow two days for refill of tank hole and site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	0.25 DAY XXQNA	0.13	4	91	32	0	0	123	492.13
Site Re-grading	0.25 DAY		4	91	32	0	0	123	492.13
TANK REMOVAL			13	309	144	189	550	1,192	
TANKS/MISC DEMOLITION & REMOVAL			13	309	144	189	550	1,192	

AZ-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AZ-14. THERMAL TREATMENT											
AZ-14 01. INCINERATION											
AZ-14 01 01. SOLIDS PREPARATION AND HANDLING											
AZ-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
AZ-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	1.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 12	0.00 0	0.00 0	11.50 12	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	1.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 8	0.00 0	7.55 8	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	1.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 2	0.00 0	0.00 0	2.30 2	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.25	DAY	ULABA	0.13	10.00 3	234.30 59	1.45 0	34.83 9	0.00 0	270.58 68	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 7	0.00 0	26.95 7	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.25	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 25	100.00 25	100.00
PPEquip, Class D	0.25	DAY			3	59	14	23	25	121	482.91
AZ-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	67.00	SY	ULABC	555.56	0.01 0	0.15 10	0.00 0	0.27 18	0.50 34	0.92 61	0.92
Plastic Cover, Excavation Area	67.00	SY			0	10	0	18	34	61	0.92

AZ-14. THERMAL TREATMENT	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
AZ-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.										
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe, Med Matl, 20 CY/Hr	22.40 CY	CODEG	20.00	0.08 2	2.03 45	0.60 13	0.00 0	0.00 0	2.63 59	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way 5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	22.40 CY	COEID	10.00	0.10 2	2.64 59	2.29 51	0.00 0	0.00 0	4.93 110	4.93
Excavate, haul to Incinerator	20.00 CY			4	105	65	0	0	169	8.46
AZ-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).										
USR AA <02080 0501 > Processing, contaminated soils Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	22.40 LCY		0.00	0.00 0	0.00 0	0.00 0	0.00 0	487.50 10,920	487.50 10,920	487.50
On-site Incineration	20.00 CY			0	0	0	0	10,920	10,920	546.00
AZ-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.										
USR AA <02221 6002 > Spread clean soil, 12" Layers Without Compaction	20.36 CY	CODTE	30.00	0.04 1	1.19 24	1.46 30	0.00 0	0.00 0	2.65 54	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way 2 Cycles/Hr, haul in random-fill	7.58 CY	COEID	20.00	0.05 0	1.32 10	1.15 9	3.77 29	0.00 0	6.24 47	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer, Without Compaction	7.58 CY	CODTE	30.00	0.04 0	1.19 9	1.46 11	0.00 0	0.00 0	2.65 20	2.65
Disposal, On-site	18.18 CY			2	43	49	29	0	121	6.66
On-site Incineration	20.00 CY			8	216	128	70	10,979	11,393	569.63

AZ-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					8	216	128	70	10,979	11,393	
INCINERATION					8	216	128	70	10,979	11,393	
THERMAL TREATMENT					8	216	128	70	10,979	11,393	
M.M. & A.A.,275Gal fuel oil Tank					21	765	272	421	11,529	12,987	

BA-02. MONITOR, SAMPLE, TEST, ANALYSIS

BA. M.M. & A.A., Acid Storage Shed
Waste Site: Missile Maintenance & Assembly Area, Acid Storage Shed

Site Considerations:
15 x 15 x 3

Potential Remedial Activity:
Soil sampling, Remove waste to TSDF (25 CY given)
BA-02. MONITOR, SAMPLE, TEST, ANALYSIS

BA-02 06. SAMPLING SOIL, SED & SOLID WASTE

BA-02 06 01. SURFACE SOIL

BA-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > pH					0.00	0.00	0.00	0.00	15.00	15.00	
	2.00	EA	N/A	0.00	0	0	0	0	30	30	15.00
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	5.00	EA	N/A	0.00	0	0	0	0	150	150	30.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	0	180	660	
SURFACE SOIL					0	480	0	0	180	660	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	0	180	660	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	0	180	660	

BA-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BA-08. SOLIDS COLLECTION & CONTAINMENT									
BA-08 01. EXCAVATION									
BA-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.									
L USR AA <02220 0000 > Excavate con. soil & Waste			0.08	2.02	1.68	0.00	0.00	3.69	
Use a 1.1 swell factor.	27.50 CY XXQMV	25.00	2	55	46	0	0	102	3.69
USR AA <02220 0000 > Load excavated soil & conc pad			0.03	0.68	1.46	0.00	0.00	2.13	
Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	27.50 CY XXQMG	40.00	1	19	40	0	0	59	2.13
Excav/Load Cont. Soil & Waste	25.00 CY		3	74	86	0	0	160	6.41
BA-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.									
USR AA <02220 0000 > Transport soil to Arlington, OR			0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	2.00 TRK	0.00	0	0	0	0	800	800	400.00
USR AA <02220 0000 > Disposal of soil in landfill			0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	42.63 TON	0.00	0	0	0	0	5,712	5,712	134.00
USR AA <02220 0000 > Oregon state environmental tax			0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	42.63 TON	0.00	0	0	0	0	1,279	1,279	30.00
USR AA <02220 0000 > Soil profile fee			0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00 EA	0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	25.00 CY		0	0	0	0	8,091	8,091	323.62
BA-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)			0.00	0.00	11.50	0.00	0.00	11.50	
	4.00 EA N/A	0.00	0	0	46	0	0	46	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek			0.00	0.00	0.00	7.55	0.00	7.55	
	4.00 EA N/A	0.00	0	0	0	30	0	30	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves			0.00	0.00	2.30	0.00	0.00	2.30	
	4.00 PR N/A	0.00	0	0	9	0	0	9	2.30

BA-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 80	0.00 0	19.94 80	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	1.00 DAY ULABA	0.13	10.00 10	234.30 234	1.45 1	34.83 35	0.00 0	270.58 271	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 27	0.00 0	26.95 27	26.95
HTW AA <01951 5723 > Cartridges, Respirator	8.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 207	0.00 0	25.87 207	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	1.00 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 100	100.00 100	100.00
PPEquip, Modified Class D	1.00 DAY		10	234	57	379	100	770	769.66
BA-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.50 DAY XXQNA	0.13	14.00 7	365.22 183	126.91 63	0.00 0	0.00 0	492.13 246	492.13
Site Re-grading	0.50 DAY		7	183	63	0	0	246	492.13
EXCAVATION			20	491	206	379	8,191	9,266	
SOLIDS COLLECTION & CONTAINMENT			20	491	206	379	8,191	9,266	
M.M. & A.A., Acid Storage Shed			20	971	206	379	8,371	9,926	

BB-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

BB. M.M. & A.A., Paint Shed
Waste Site: Missile Maintenance & Assembly Area, Paint Shed

Site Considerations:
10 x 10 x 3

Potential Remedial Activity:
Soil sampling, Remove waste to TSDF (10 CY given)
BB-02. MONITOR, SAMPLE, TEST, ANALYSIS

BB-02 06. SAMPLING SOIL, SED & SOLID WASTE

BB-02 06 01. SURFACE SOIL

BB-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	12.00	EA	N/A	0.00	0	0	0	0	360	360	30.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	0	360	840	
SURFACE SOIL					0	480	0	0	360	840	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	0	360	840	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	0	360	840	

BB-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BB-08. SOLIDS COLLECTION & CONTAINMENT									
BB-08 01. EXCAVATION									
BB-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.									
L USR AA <02220 0000 > Excavate con. soil & Waste Use a 1.1 swell factor.	11.00 CY XXQMV	25.00	0.08 1	2.02 22	1.68 18	0.00 0	0.00 0	3.69 41	3.69
USR AA <02220 0000 > Load excavated soil & conc pad Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	11.00 CY XXQMG	40.00	0.03 0	0.68 7	1.46 16	0.00 0	0.00 0	2.13 23	2.13
Excav/Load Cont. Soil & Waste	10.00 CY		1	30	34	0	0	64	6.41
BB-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.									
USR AA <02220 0000 > Transport soil to Arlington, OR 1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	1.00 TRK	0.00	0.00 0	0.00 0	0.00 0	0.00 0	400.00 400	400.00 400	400.00
USR AA <02220 0000 > Disposal of soil in landfill Disposal fee	17.05 TON	0.00	0.00 0	0.00 0	0.00 0	0.00 0	134.00 2,285	134.00 2,285	134.00
USR AA <02220 0000 > Oregon state environmental tax Estimated '93 tax.	17.05 TON	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 512	30.00 512	30.00
USR AA <02220 0000 > Soil profile fee Required by Arlington	1.00 EA	0.00	0.00 0	0.00 0	0.00 0	0.00 0	300.00 300	300.00 300	300.00
Transport Cont. Soils, Arlington	10.00 CY		0	0	0	0	3,496	3,496	349.62
BB-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00 EA N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00 PR N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30

BB-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	19.94 40	0.00 0	19.94 40	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.	0.50 DAY ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
HTW AA <01951 5723 > Cartridges, Respirator	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	25.87 103	0.00 0	25.87 103	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50 DAY N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Modified Class D	0.50 DAY		5	117	28	189	50	385	769.66
BB-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew	0.25 DAY XXQNA	0.13	14.00 4	365.22 91	126.91 32	0.00 0	0.00 0	492.13 123	492.13
Site Re-grading	0.25 DAY		4	91	32	0	0	123	492.13
EXCAVATION			10	238	94	189	3,546	4,068	
SOLIDS COLLECTION & CONTAINMENT			10	238	94	189	3,546	4,068	
M.M. & A.A., Paint Shed			10	718	94	189	3,906	4,908	

BC-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

BC. Flammable Storage Block Shed
Waste Site: Flammable Storage Block Shed

Site Considerations:
Block Shed may have replaced Paint Shed, 10 x 10 x 3

Potential Remedial Activity:
Soil Sampling, Remove waste to TSDF (10 CY given)
BC-02. MONITOR, SAMPLE, TEST, ANALYSIS

BC-02 06. SAMPLING SOIL, SED & SOLID WASTE

BC-02 06 01. SURFACE SOIL

BC-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > 3050, Metals analysis	12.00 EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 360	30.00 360	30.00
USR AA <01954 760 > Sample Labor - 2 men	16.00 HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Confirmatory Samples & Analyses				0	480	0	0	360	840	
SURFACE SOIL				0	480	0	0	360	840	
SAMPLING SOIL, SED & SOLID WASTE				0	480	0	0	360	840	
MONITOR, SAMPLE, TEST, ANALYSIS				0	480	0	0	360	840	

BC-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BC-08. SOLIDS COLLECTION & CONTAINMENT											
BC-08 01. EXCAVATION											
BC-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.											
L USR AA <02220 0000 > Excavate con. soil & Waste					0.08	2.02	1.68	0.00	0.00	3.69	
Use a 1.1 swell factor.	11.00	CY	XXQMV	25.00	1	22	18	0	0	41	3.69
USR AA <02220 0000 > Load excavated soil & conc pad					0.03	0.68	1.46	0.00	0.00	2.13	
Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	11.00	CY	XXQMG	40.00	0	7	16	0	0	23	2.13
Excav/Load Cont. Soil & Waste	10.00	CY			1	30	34	0	0	64	6.41
BC-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.											
USR AA <02220 0000 > Transport soil to Arlington, OR					0.00	0.00	0.00	0.00	400.00	400.00	
1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	1.00	TRK		0.00	0	0	0	0	400	400	400.00
USR AA <02220 0000 > Disposal of soil in landfill					0.00	0.00	0.00	0.00	134.00	134.00	
Disposal fee	17.05	TON		0.00	0	0	0	0	2,285	2,285	134.00
USR AA <02220 0000 > Oregon state environmental tax					0.00	0.00	0.00	0.00	30.00	30.00	
Estimated '93 tax.	17.05	TON		0.00	0	0	0	0	512	512	30.00
USR AA <02220 0000 > Soil profile fee					0.00	0.00	0.00	0.00	300.00	300.00	
Required by Arlington	1.00	EA		0.00	0	0	0	0	300	300	300.00
Transport Cont. Soils, Arlington	10.00	CY			0	0	0	0	3,496	3,496	349.62
BC-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)					0.00	0.00	11.50	0.00	0.00	11.50	
	2.00	EA	N/A	0.00	0	0	23	0	0	23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek					0.00	0.00	0.00	7.55	0.00	7.55	
	2.00	EA	N/A	0.00	0	0	0	15	0	15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves					0.00	0.00	2.30	0.00	0.00	2.30	
	2.00	PR	N/A	0.00	0	0	5	0	0	5	2.30

BC-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators			0.00	0.00	0.00	19.94	0.00	19.94	
	2.00 EA N/A	0.00	0	0	0	40	0	40	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.			10.00	234.30	1.45	34.83	0.00	270.58	
	0.50 DAY ULABA	0.13	5	117	1	17	0	135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)			0.00	0.00	0.00	26.95	0.00	26.95	
	0.50 DAY N/A	0.00	0	0	0	13	0	13	26.95
HTW AA <01951 5723 > Cartridges, Respirator			0.00	0.00	0.00	25.87	0.00	25.87	
	4.00 EA N/A	0.00	0	0	0	103	0	103	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.			0.00	0.00	0.00	0.00	100.00	100.00	
	0.50 DAY N/A	0.00	0	0	0	0	50	50	100.00
PPEquip, Modified Class D	0.50 DAY		5	117	28	189	50	385	769.66
BC-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	0.25 DAY XXQNA	0.13	4	91	32	0	0	123	492.13
Site Re-grading	0.25 DAY		4	91	32	0	0	123	492.13
EXCAVATION			10	238	94	189	3,546	4,068	
SOLIDS COLLECTION & CONTAINMENT			10	238	94	189	3,546	4,068	
Flammable Storage Block Shed			10	718	94	189	3,906	4,908	

BD-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST

BD. M.M. & A.A., Dry Well
Waste Site: Missile Maintenance & Assembly Area, Dry Well

Site Considerations:
5 x 5 x 5

Potential Remedial Activity:
Crush & Remove Dry Well & soil, Confirmatory Sampling (5 CY given)
BD-02. MONITOR, SAMPLE, TEST, ANALYSIS

BD-02 06. SAMPLING SOIL, SED & SOLID WASTE

BD-02 06 01. SURFACE SOIL

BD-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

USR AA <01954 760 > 8240, VOA - volatile organics					0.00	0.00	0.00	0.00	205.00	205.00	
	5.00	EA	N/A	0.00	0	0	0	0	1,025	1,025	205.00
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	1,025	1,667	
SURFACE SOIL					0	480	0	162	1,025	1,667	
SAMPLING SOIL, SED & SOLID WASTE					0	480	0	162	1,025	1,667	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	1,025	1,667	

BD-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BD-08. SOLIDS COLLECTION & CONTAINMENT									
BD-08 01. EXCAVATION									
BD-08 01 01. Excav/Load Cont. Soil & Waste Quantity of Wastes as given by NPW-Env Engr.									
L USR AA <02220 0000 > Excavate con. soil & Waste Use a 1.1 swell factor.	5.50 CY XXQMV	6.00	0.33 2	8.40 46	6.98 38	0.00 0	0.00 0	15.39 85	15.39
USR AA <02220 0000 > Load excavated soil & conc pad Load in 28-ton dump trucks - DOT approved hazardeous waste hauler. Assume 3,100 lb/bcy.	5.50 CY XXQMG	20.00	0.05 0	1.35 7	2.91 16	0.00 0	0.00 0	4.27 23	4.27
Excav/Load Cont. Soil & Waste	5.00 CY		2	54	54	0	0	108	21.62
BD-08 01 02. Transport Cont. Soils, Arlington Transport contaminated soils to Arlington for disposal there. Unit cost for transport and disposal from Chem. Waste Management, Inc., Arlington.									
USR AA <02220 0000 > Transport soil to Arlington, OR 1 cy x 3,100 lb/cy 28 tons/truck == 17.5 CY/Trk	1.00 TRK	0.00	0.00 0	0.00 0	0.00 0	0.00 0	400.00 400	400.00 400	400.00
USR AA <02220 0000 > Disposal of soil in landfill Disposal fee	8.53 TON	0.00	0.00 0	0.00 0	0.00 0	0.00 0	134.00 1,142	134.00 1,142	134.00
USR AA <02220 0000 > Oregon state environmental tax Estimated '93 tax.	8.53 TON	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 256	30.00 256	30.00
USR AA <02220 0000 > Soil profile fee Required by Arlington	1.00 EA	0.00	0.00 0	0.00 0	0.00 0	0.00 0	300.00 300	300.00 300	300.00
Transport Cont. Soils, Arlington	5.00 CY		0	0	0	0	2,098	2,098	419.62
BD-08 01 03. PPEquip, Modified Class D This item covers cost for Personal Protection Equipment, which is assumed a Modified Class D. Also included is an allowance for daily operation of the Decon shower, equipment decon, and disposal.									
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00 EA N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00 PR N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30

BD-08. SOLIDS COLLECTION & CONTAINMENT	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
HTW AA <01951 5726 > Half-Mask Air Purifying Respirators			0.00	0.00	0.00	19.94	0.00	19.94	
	2.00 EA N/A	0.00	0	0	0	40	0	40	19.94
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost) For equipment decon.			10.00	234.30	1.45	34.83	0.00	270.58	
	0.50 DAY ULABA	0.13	5	117	1	17	0	135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)			0.00	0.00	0.00	26.95	0.00	26.95	
	0.50 DAY N/A	0.00	0	0	0	13	0	13	26.95
HTW AA <01951 5723 > Cartridges, Respirator			0.00	0.00	0.00	25.87	0.00	25.87	
	4.00 EA N/A	0.00	0	0	0	103	0	103	25.87
USR AA <01951 5805 > Disposal Allowance. Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.			0.00	0.00	0.00	0.00	100.00	100.00	
	0.50 DAY N/A	0.00	0	0	0	0	50	50	100.00
PPEquip, Modified Class D	0.50 DAY		5	117	28	189	50	385	769.66
BD-08 01 04. Site Re-grading Allow for site re-grading after site is certified clean.									
L USR AA <02220 0000 > Use D3 Dozer Excavation crew			14.00	365.22	126.91	0.00	0.00	492.13	
	0.25 DAY XXQNA	0.13	4	91	32	0	0	123	492.13
Site Re-grading	0.25 DAY		4	91	32	0	0	123	492.13
EXCAVATION			11	262	114	189	2,148	2,714	
SOLIDS COLLECTION & CONTAINMENT			11	262	114	189	2,148	2,714	
M.M. & A.A., Dry Well			11	742	114	351	3,173	4,381	

BE-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BE. Generator Building									
Waste Site: Generator Building									
Site Considerations:									
21 x 11 wood frame building with cement floor									
Potential Remedial Activity:									
Remove Asbestos waste to TSDF, with Confirmatory Sampling									
BE-02. MONITOR, SAMPLE, TEST, ANALYSIS									
BE-02 06. SAMPLING SOIL & SEDIMENT									
BE-02 06 01. SURFACE SOIL									
BE-02 06 01 02. Confirmatory Samples & Analyses									
Sample & analyze soil, Confirmatory. Analyses cost given below.									
USR AA <01954 760 > 8080, PCB - soil	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > PCB, In-field Test	2.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	183.26 367	0.00 0	183.26 367	183.26
USR AA <01954 760 > Asbestos soil/solids	4.00 EA N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	75.00 300	75.00 300	75.00
USR AA <01954 760 > Sample Labor - 2 men	16.00 HR N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Confirmatory Samples & Analyses			0	480	0	367	680	1,527	
SURFACE SOIL			0	480	0	367	680	1,527	
SAMPLING SOIL & SEDIMENT			0	480	0	367	680	1,527	
MONITOR, SAMPLE, TEST, ANALYSIS			0	480	0	367	680	1,527	

BE-10. STRUCTURES/MISC DEMO & REMOVAL	QUANTY UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BE-10. STRUCTURES/MISC DEMO & REMOVAL										
BE-10 02. TANK REMOVAL										
BE-10 02 01. TANK REMOVAL Allow $1,250 for removal of a small tank (approx. 250 Gal) which appears to have been a diesel or fuel oil storage tank.										
TANK REMOVAL				0	750	250	0	250	1,250	
TANK REMOVAL				0	750	250	0	250	1,250	
BE-10 03. STRUCTURE REMOVAL										
BE-10 03 01. STRUCTURE REMOVAL										
USR AA <02111 2202 > Demo Bldg Foundation.				0.06	1.62	1.45	0.00	5.00	8.07	
Use FE Ldr crew, plus allow in "Other" for air-hammer to break up conc foundation.	155.00 CY	CODLI	25.00	9	251	225	0	775	1,251	8.07
USR AA <02111 3103 > Demo 12" Conc Block Partition				0.02	0.41	0.36	0.00	0.00	0.77	
This covers the conc block office area demo. Use FE Ldr crew.	350.00 SF	CODLI	100.00	5	142	127	0	0	269	0.77
USR AA <02111 3501 > Demo Drywall & Stud Partition				0.01	0.27	0.24	0.00	0.00	0.51	
Mtl/Wood Stud w/Drywall 2 Sides This item covers demo of wooden exterior walls. Use FE Ldr to demo & load debris into trucks.	2100.00 SF	CODLI	150.00	21	568	507	0	0	1,075	0.51
USR AA <02112 1722 > Demo Corrugated alum roof/siding				0.01	0.16	0.14	0.00	0.00	0.31	
	1750.00 SF	CODLI	250.00	11	284	254	0	0	537	0.31
STRUCTURE REMOVAL				46	1,245	1,112	0	775	3,132	
STRUCTURE REMOVAL				46	1,245	1,112	0	775	3,132	
BE-10 04. ASBESTOS ABATEMENT										
BE-10 04 01. ASBESTOS ABATEMENT Allow $1,000 for potential Asbestos or PCB removal from the building prior to building demolition. Tests will confirm presence of ACM or PCB.										
ASBESTOS ABATEMENT				0	750	200	50	0	1,000	
ASBESTOS ABATEMENT				0	750	200	50	0	1,000	

BE-10. STRUCTURES/MISC DEMO & REMOVAL	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
STRUCTURES/MISC DEMO & REMOVAL					46	2,745	1,562	50	1,025	5,382	
Generator Building					46	3,225	1,562	417	1,705	6,908	

BF-02. MONITOR, SAMPLE, TEST, ANALYSIS

BF. Horseshoe Site
Waste Site: Horseshoe Site

Site Considerations:
0.5 Acre Site

Potential Remedial Activity:
Soil Gas & Geophysical Surveys, Soil Sampling
BF-02. MONITOR, SAMPLE, TEST, ANALYSIS

BF-02 06. SAMPLING SOIL, SED & SOLID WASTE

BF-02 06 01. SURFACE SOIL

BF-02 06 01 01. Soil Samples & Analyses
Sample & analyze soil. Analyses cost given in detail.

	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > 8240, VOA - volatile organics	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	205.00 820	205.00 820	205.00
USR AA <01954 760 > 8080, PCB - soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	95.00 380	95.00 380	95.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	135.00 540	135.00 540	135.00
USR AA <01954 760 > 8270, BNA - Base neutral acid	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	360.00 1,440	360.00 1,440	360.00
USR AA <01954 760 > 3050, Metals analysis	20.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	30.00 600	30.00 600	30.00
USR AA <01954 760 > 8150, Chlorinated herbicides	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	110.00 440	110.00 440	110.00
USR AA <01954 760 > pH	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	15.00 60	15.00 60	15.00
USR AA <01954 760 > Asbestos soil	4.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	75.00 300	75.00 300	75.00
USR AA <01954 760 > Sample Labor - 2 men	16.00	HR	N/A	0.00	0.00 0	30.00 480	0.00 0	0.00 0	0.00 0	30.00 480	30.00
Soil Samples & Analyses					0	480	0	0	4,580	5,060	
SURFACE SOIL					0	480	0	0	4,580	5,060	

BF-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BF-02 06 02. VADOSE ZONE SAMPLING, Soil Gas Soil Gas sampling, 30 sample points, will be done to determine if any contaminates still present. Remedial action will be determined by results of surveys at the site. Soil Gas sample cost from Tracer Research Corporation, Tucson, Arizona, based on taking all samples in 1100 Area at one time.									
VADOSE ZONE SAMPLING, Soil Gas	30.00 EA		0	0	0	0	8,250	8,250	275.00
BF-02 06 91. TEST PIT									
L USR AA <02220 0000 > Excavate Test Pit (3'W x 6'D)			0.20	5.04	4.19	0.00	0.00	9.23	
Assume pit 25' L, say: 20 CY.	20.00 CY XXQMV	10.00	4	101	84	0	0	185	9.23
TEST PIT			4	101	84	0	0	185	
SAMPLING SOIL, SED & SOLID WASTE			4	581	84	0	12,830	13,495	
BF-02 11. GEOTECHNICAL TESTING									
BF-02 11 01. GEOTEC TESTG, Geophysical Survey Use Geophysical Survey (Ground penetrating radar) to define limits of landfill and determine presence of drums or other waste, based on quote from Geo Recon, Seattle.									
GEOTEC TESTG, Geophysical Survey			0	0	0	0	3,500	3,500	
GEOTECHNICAL TESTING			0	0	0	0	3,500	3,500	
MONITOR, SAMPLE, TEST, ANALYSIS			4	581	84	0	16,330	16,995	
Horseshoe Site			4	581	84	0	16,330	16,995	

BG. H-52-L Surface Gas Tank Area
Waste Site: H-52-L Surface Gas Tank Area (2 - 475 Gal tanks)

Site Considerations:
20 x 20 x 3

Potential Remedial Activity:
Soil Sampling, Remove waste to TSDF (45 CY given) Assuming Tanks OK.
BG-02. MONITOR, SAMPLE, TEST, ANALYSIS

BG-02 06. SAMPLING SOIL & SEDIMENT

BG-02 06 01. SURFACE SOIL

BG-02 06 01 02. Confirmatory Samples & Analyses
Sample & analyze soil, Confirmatory. Analyses cost given below.

BG-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
USR AA <01954 760 > TPH, In-field Test					0.00	0.00	0.00	161.70	0.00	161.70	
	1.00	EA	N/A	0.00	0	0	0	162	0	162	161.70
USR AA <01954 760 > 3050, Metals analysis					0.00	0.00	0.00	0.00	30.00	30.00	
	4.00	EA	N/A	0.00	0	0	0	0	120	120	30.00
USR AA <01954 760 > 8015, TRPH, total recoverable petroleum hydrocarbons - mod.					0.00	0.00	0.00	0.00	135.00	135.00	
	2.00	EA	N/A	0.00	0	0	0	0	270	270	135.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	16.00	HR	N/A	0.00	0	480	0	0	0	480	30.00
Confirmatory Samples & Analyses					0	480	0	162	390	1,032	
SURFACE SOIL					0	480	0	162	390	1,032	
SAMPLING SOIL & SEDIMENT					0	480	0	162	390	1,032	
MONITOR, SAMPLE, TEST, ANALYSIS					0	480	0	162	390	1,032	

BG-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BG-14. THERMAL TREATMENT											
BG-14 01. INCINERATION											
BG-14 01 01. SOLIDS PREPARATION AND HANDLING											
BG-14 01 01 01. On-site Incineration Quantity used is in Bank CY as given by Designer. The "links" below convert the CY into LCY, using a 1.12 factor.											
BG-14 01 01 01 01. PPEquip, Class D Assume workers in Class D PPE during excavation and hauling to incinerator site. Included also is a decon shower, and equipment decon equipment. This item covers 4 personnel.											
M HTW AA <01951 5202 > Boot Covers, Tyvek (Bag Of 10Pr)	2.00	EA	N/A	0.00	0.00 0	0.00 0	11.50 23	0.00 0	0.00 0	11.50 23	11.50
M HTW AA <01951 5204 > Coveralls, Tyvek	2.00	EA	N/A	0.00	0.00 0	0.00 0	0.00 0	7.55 15	0.00 0	7.55 15	7.55
M HTW AA <01951 5501 > Butyl, Medium Weight, Gloves	2.00	PR	N/A	0.00	0.00 0	0.00 0	2.30 5	0.00 0	0.00 0	2.30 5	2.30
USR AA <01957 3105 > Cold Water, Gasoline, 3200 psi, 4.2 gpm, 11 HP (Daily cost)	0.50	DAY	ULABA	0.13	10.00 5	234.30 117	1.45 1	34.83 17	0.00 0	270.58 135	270.58
M HTW AA <01957 4301 > 8 Ft x 36 Ft, 2 Showers, 2 Wall Fans (Monthly Rental)	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	26.95 13	0.00 0	26.95 13	26.95
USR AA <01957 5805 > Disposal allowance Allow $100/day for disposal of personnel protection items and equipment/vehicle decon water.	0.50	DAY	N/A	0.00	0.00 0	0.00 0	0.00 0	0.00 0	100.00 50	100.00 50	100.00
PPEquip, Class D	0.50	DAY			5	117	28	46	50	241	482.91
BG-14 01 01 01 03. Plastic Cover, Excavation Area Plastic to cover excavated area while waiting for Site Certification.											
M HTW AA <02082 7211 > Plastic Excavation Cover 6-mil visqueen; Area based on the quantity of excavation. Allow $0.50/SY for disposal.	150.75	SY	ULABC	555.56	0.01 1	0.15 22	0.00 0	0.27 41	0.50 75	0.92 138	0.92
Plastic Cover, Excavation Area	150.75	SY			1	22	0	41	75	138	0.92

BG-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BG-14 01 01 01 02A. Excavate, haul to Incinerator Assume Incinerator located at 1100 Area, about 13 miles from the lower IU site. The top waste sites (radar sites) are another 5-mi up a 7.5% grade. Assume 2-cycles per hour to the lower site, 1-cycle per hour up to the top sites. Excavate, haul, and stockpile at incinerator site.											
USR AA <02225 2112 > Excavate & Load, 1-CY Backhoe,					0.08	2.03	0.60	0.00	0.00	2.63	
Med Matl, 20 CY/Hr	50.40	CY	CODEG	20.00	4	102	30	0	0	132	2.63
USR AA <02225 3104 > Haul, 12 CY Truck, 18-Mi one-way					0.10	2.64	2.29	0.00	0.00	4.93	
5-mi are a a 7.5% grade, so assume 1 Cycle/Hr, 10 LCY.	50.40	CY	COEID	10.00	5	133	115	0	0	248	4.93
Excavate, haul to Incinerator	45.00	CY			9	235	146	0	0	381	8.46
BG-14 01 01 01 02B. On-site Incineration On-site Incineration: processing rate: 5 Ton/Hr = 80.5 LCY/Day, 24-Hr operation cost: $325/Ton = $487.50/LCY (Avg rate), includes power, water, & operator (Vesta Technology).											
USR AA <02080 0501 > Processing, contaminated soils					0.00	0.00	0.00	0.00	487.50	487.50	
Processing cost: $325/Ton Processing Rate: 5 Tons/Hr 1 LCY = 2,940 LB = 1.5 Ton 5T/H/1.5T/LCYx24H/D= 80.5 LCY/D and $325/Ton == $487.50/LCY	50.40	LCY		0.00	0	0	0	0	24,570	24,570	487.50
On-site Incineration	45.00	CY			0	0	0	0	24,570	24,570	546.00
BG-14 01 01 01 02C. Disposal, On-site Assume clean soil spread close to incinerator site. Soil is then covered with a 6" layer of random fill.											
USR AA <02221 6002 > Spread clean soil, 12" Layers					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	45.82	CY	CODTE	30.00	2	54	67	0	0	121	2.65
USR AA <02225 3104 > Haul, 12 CY Truck, 10-Mi one-way					0.05	1.32	1.15	3.77	0.00	6.24	
2 Cycles/Hr, haul in random-fill	17.05	CY	COEID	20.00	1	22	20	64	0	106	6.24
M USR AA <02221 6001 > Spread Random Fill, 6" Layer,					0.04	1.19	1.46	0.00	0.00	2.65	
Without Compaction	17.05	CY	CODTE	30.00	1	20	25	0	0	45	2.65
Disposal, On-site	40.91	CY			3	97	111	64	0	273	6.66
On-site Incineration	45.00	CY			18	472	285	151	24,695	25,603	568.96

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
BG. H-52-L Surface Gas Tank Area

BG-14. THERMAL TREATMENT	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
SOLIDS PREPARATION AND HANDLING					18	472	285	151	24,695	25,603	
INCINERATION					18	472	285	151	24,695	25,603	
THERMAL TREATMENT					18	472	285	151	24,695	25,603	
H-52-L Surface Gas Tank Area					18	952	285	313	25,085	26,635	

BH-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BH. Elevator Doors											
Waste Site: Elevator Doors (where ?)											
Site Considerations:											
Two doors (12'x33') with 1.5" Bitumin sealant around edges											
Potential Remedial Activity:											
Take sample for PCB, Remove sealant, Waste to OSI (5 CY given)											
BH-02. MONITOR, SAMPLE, TEST, ANALYSIS											
BH-02 06. SAMPLING SOIL, SED & SOLID WASTE											
BH-02 06 01. SURFACE SOIL											
BH-02 06 01 02. Confirmatory Samples & Analyses											
Sample & analyze door seals, Confirmatory. Analyses cost given below.											
USR AA <01954 760 > 8080, PCBs					0.00	0.00	0.00	0.00	95.00	95.00	
	1.00	EA	N/A	0.00	0	0	0	0	95	95	95.00
USR AA <01954 760 > Sample Labor - 2 men					0.00	30.00	0.00	0.00	0.00	30.00	
	8.00	HR	N/A	0.00	0	240	0	0	0	240	30.00
Confirmatory Samples & Analyses					0	240	0	0	95	335	
SURFACE SOIL					0	240	0	0	95	335	
SAMPLING SOIL, SED & SOLID WASTE					0	240	0	0	95	335	
MONITOR, SAMPLE, TEST, ANALYSIS					0	240	0	0	95	335	

BH-10. STRUCTURES/MISC DEMO & REMOVAL	QUANTY UOM CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BH-10. STRUCTURES/MISC DEMO & REMOVAL									
BH-10 07. MISCELLANEOUS ITEMS									
BH-10 07 01. MISCELLANEOUS ITEMS									
USR AA <02084 5000 > Removal of 1.5" Bitumin sealant from elevator door edges. Allow 16 mhrs for two workers, about 5 CY waste produced, disposal by the OSI at $487.50/CY or $2,450. Sealant assumed to contain PCBs.			16.00	480.00	50.00	0.00	2450.00	2980.00	
	1.00 LS	0.00	16	480	50	0	2,450	2,980	2980.00
MISCELLANEOUS ITEMS			16	480	50	0	2,450	2,980	
MISCELLANEOUS ITEMS			16	480	50	0	2,450	2,980	
STRUCTURES/MISC DEMO & REMOVAL			16	480	50	0	2,450	2,980	
Elevator Doors			16	720	50	0	2,545	3,315	

BJ-02. MONITOR, SAMPLE, TEST, ANALYSIS	QUANTY	UOM	CREW ID	OUTPUT	MHRS	LABR	EQUIP	MAT	OTHER	TOTAL COST	UNIT COST
BJ. IU1 Characterization Well											
IU-1 Characterization Well											
Install one (1) Characterization well to a 800 LF depth. Take 20 soil and 1 water samples for Target compound and target aniyte list analysis.											
BJ-02. MONITOR, SAMPLE, TEST, ANALYSIS											
BJ-02 04. MONITORING WELLS											
BJ-02 04 01. WELL DRILLING & CONSTRUCTION Install one (1), 4" D Characterization well to 800 LF, the 800 LF based on a boring log for an existing well on-site.											
BJ-02 04 01 01. IU1, 4" D, Characterization Well As NPW-EN-EE is not sure how this well will actually be done, it was decided to use the recent quote from WHC/Kaiser for drill monitoring wells in the 1100 Area at $850/VLF. This cost includes: drilling, installation and development. All SubContr overhead markups, and all safety items are also covered by the unit cost.											
IU1, 4" D, Characterization Well	800.00	LF			0	0	0	0	680,000	680,000	850.00
WELL DRILLING & CONSTRUCTION	1.00	EA			0	0	0	0	680,000	680,000	680000.00
MONITORING WELLS					0	0	0	0	680,000	680,000	
BJ-02 05. SAMPLING S.W./GROUND WATER/L.W.											
BJ-02 05 02. SOIL/GROUND WATER Sampling Given: 20 Soil & 1 GW sampling & analysis events - $1,000 analysis cost per event, with 2 men @ 8 Hr each (use $30/Hr).											
SOIL/GROUND WATER Sampling	21.00	EA			0	10,080	0	0	21,000	31,080	1480.00
SAMPLING S.W./GROUND WATER/L.W.					0	10,080	0	0	21,000	31,080	
MONITOR, SAMPLE, TEST, ANALYSIS					0	10,080	0	0	701,000	711,080	
IU1 Characterization Well					0	10,080	0	0	701,000	711,080	
HANFORD: REMEDIATION					1,932	106,752	39,732	27,933	3,493,506	3,667,923	

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** CREW BACKUP **

TIME 11:50:38

BACKUP PAGE 1

SRC	ITEM ID	DESCRIPTION	NO.	UOM	RATE	**** LABOR **** HOURS	COST	**** EQUIP **** HOURS	COST	TOTAL COST
	CODEG	1 B-eqoprmed + 1 Backhoe Loader, 55 Hp			PROD = 100%				CREW HOURS =	269
MIL	B-LABORER L	Laborer (Semi-Skilled)	0.50	HR	23.33	0.50	11.67			11.67
MIL	B-EQOPRMEDF	Eq Oper, Medium	1.00	HR	28.89	1.00	28.89			28.89
MIL	L50CS002 E	LDR,W/BH,WH,1.0CY FE BKT/24"DIP	1.00	HR	11.95			1.00	11.95	11.95
	TOTAL					1.50	40.56	1.00	11.95	52.50
	CODLI	1 B-eqoprmed + 1 Front End Ldr, 4 Cy, Wheel Mtd			PROD = 100%				CREW HOURS =	31
MIL	B-LABORER L	Laborer (Semi-Skilled)	0.50	HR	23.33	0.50	11.67			11.67
MIL	B-EQOPRMEDF	Eq Oper, Medium	1.00	HR	28.89	1.00	28.89			28.89
MIL	L40CS005 E	LDR,FE,WH, 4.00 CY, 4-WD ARTIC	1.00	HR	36.22			1.00	36.22	36.22
	TOTAL					1.50	40.56	1.00	36.22	76.77
	CODTE	1 B-eqoprmed + 1 Dozer, Cat D-6H, 165 Hp			PROD = 100%				CREW HOURS =	224
MIL	B-EQOPRMEDF	Eq Oper, Medium	0.25	HR	28.89	0.25	7.22			7.22
MIL	B-EQOPRMEDL	Eq Oper, Medium	1.00	HR	28.39	1.00	28.39			28.39
MIL	T10CA010 E	BLADE, ANGLE, HYDR, FOR D6	1.00	HR	4.05			1.00	4.05	4.05
MIL	T15CA010 E	DOZER,CWLR,D-6H,PS,(ADD BLADE)	1.00	HR	39.69			1.00	39.69	39.69
	TOTAL					1.25	35.61	2.00	43.74	79.35
	COEID	1 B-trkdvrhv + 1 Dump Truck, 12 Cy			PROD = 100%				CREW HOURS =	417
MIL	B-TRKDVRHVL	Truck Drivers, Heavy	1.00	HR	26.39	1.00	26.39			26.39
MIL	T40XX010 E	TRUCK OPT,REAR DUMP BODY, 12 CY	1.00	HR	2.69			1.00	2.69	2.69
MIL	T50GM016 E	TRK, HWY, 3 AXLE, 41000 GVW, 6X	1.00	HR	20.21			1.00	20.21	20.21
	TOTAL					1.00	26.39	2.00	22.90	49.29
	ULABA	1 B-laborer + Small Tools			PROD = 100%				CREW HOURS =	324
MIL	B-LABORER F	Laborer (Semi-Skilled)	0.25	HR	23.83	0.25	5.96			5.96
MIL	B-LABORER L	Laborer (Semi-Skilled)	1.00	HR	23.33	1.00	23.33			23.33
MIL	XMIXX020 E	Small Tools	0.13	HR	1.39			0.13	0.18	0.18
	TOTAL					1.25	29.29	0.13	0.18	29.47
	ULABC	3 B-laborer + Small Tools			PROD = 100%				CREW HOURS =	29
MIL	B-LABORER L	Laborer (Semi-Skilled)	3.00	HR	23.33	3.00	69.99			69.99
MIL	B-LABORER F	Laborer (Semi-Skilled)	0.50	HR	23.83	0.50	11.92			11.92
MIL	XMIXX020 E	Small Tools	0.40	HR	1.39			0.40	0.56	0.56
	TOTAL					3.50	81.91	0.40	0.56	82.46
	XXQMG	1 X-eqoprmed + 1 Front End Ldr, 5-1/4 Cy, Wheel			PROD = 100%				CREW HOURS =	3
MIL	L40CA007 E	LDR,FE,WH, 5-1/4 CY ARTIC,980-C	1.00	HR	58.23			1.00	58.23	58.23
MIL	X-EQOPRMEDL	Outside Equip. Op. Medium	1.00	HR	27.09	1.00	27.09			27.09
	TOTAL					1.00	27.09	1.00	58.23	85.32

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** CREW BACKUP **

TIME 11:50:38

BACKUP PAGE 2

SRC	ITEM ID	DESCRIPTION	NO.	UOM	RATE	**** LABOR **** HOURS	COST	**** EQUIP **** HOURS	COST	TOTAL COST
	XXQMV	1 X-eqoprmed + 1 Hydr. Excavator, 1-1/2 Cy, Cwlr			PROD =	100%			CREW HOURS =	75
MIL	H25JD009 E	HYD EXCAV,CRWLR,1.5 CY BKT	1.00	HR	41.74			1.00	41.74	41.74
MIL	XMIXX020 E	Small Tools	0.11	HR	1.39			0.11	0.15	0.15
MIL	X-LABORER L	Outside Laborer	1.00	HR	23.33	1.00	23.33			23.33
MIL	X-EQOPRMEDL	Outside Equip. Op. Medium	1.00	HR	27.09	1.00	27.09			27.09
	TOTAL					2.00	50.42	1.11	41.89	92.31
	XXQNA	1 X-eqoprmed + 1 Dozer, Cat D-3C, 65 Hp			PROD =	100%			CREW HOURS =	60
MIL	T10CA001 E	BLADE,POWER ANGLE TILT,FOR D3	1.00	HR	1.92			1.00	1.92	1.92
MIL	T15CA003 E	DOZER,CWLR,D-3C,PS,(ADD BLADE)	1.00	HR	13.94			1.00	13.94	13.94
MIL	X-LABORER L	Outside Laborer	0.50	HR	23.33	0.50	11.67			11.67
MIL	X-EQOPRMEDL	Outside Equip. Op. Medium	1.00	HR	27.09	1.00	27.09			27.09
MIL	X-EQOPRMEDF	Outside Equip. Op. Medium	0.25	HR	27.59	0.25	6.90			6.90
	TOTAL					1.75	45.65	2.00	15.86	61.52

Wed 24 Mar 1993

U.S. Army Corps of Engineers
PROJECT OSIIUR: HANFORD: REMEDIATION - 1.4.10.1.1.23.04.2.2
1100-IU-1, Waste Site Cost Est., REVISED f/ OSI
** LABOR BACKUP **

TIME 11:50:38

SRC	LABOR ID	DESCRIPTION	BASE	OVERTM	TXS/INS	FRNG	TRVL	RATE	UOM	UPDATE	**** TOTAL **** DEFAULT	HOURS
MIL	B-EQOPRMED	Equipment Operator, Medium	28.39	0.0%	0.0%	0.00	0.00	28.39	HR	10/15/92	26.13	580
MIL	B-LABORER	Laborer/Helper	23.33	0.0%	0.0%	0.00	0.00	23.33	HR	10/15/92	22.36	657
MIL	B-TRKDVRHV	Truck Drivers, Heavy	26.39	0.0%	0.0%	0.00	0.00	26.39	HR	10/15/92	25.61	417
MIL	X-EQOPRMED	Outside Equipment Oper. Medium	27.09	0.0%	0.0%	0.00	0.00	27.09	HR	10/15/92	25.84	153
MIL	X-LABORER	Outside Laborer	23.33	0.0%	0.0%	0.00	0.00	23.33	HR	10/15/92	22.36	105

SRC	EQUIP ID	DESCRIPTION	DEPR	CAPT	FUEL	FOG	EQ REP	TR WR	TR REP	TOTAL	UOM	** TOTAL ** HOURS
MIL	H25JD009	HYD EXCAV,CRWLR,1.5 CY BKT	14.34	5.11	4.87	1.8	15.56			41.74	HR	75
MIL	L40CA007	LDR,FE,WH, 5-1/4 CY ARTIC,980-C	17.46	7.15	7.97	2.3	15.74	6.54	0.98	58.23	HR	3
MIL	L40CS005	LDR,FE,WH, 4.00 CY, 4-WD ARTIC	9.88	4.18	6.05	2.5	10.28	2.85	0.43	36.22	HR	31
MIL	L50CS002	LDR,W/BH,WH,1.0CY FE BKT/24"DIP	3.42	1.42	1.86	0.6	4.04	0.53	0.08	11.95	HR	269
MIL	T10CA001	BLADE,POWER ANGLE TILT,FOR D3	0.75	0.27		0.0	0.82			1.92	HR	60
MIL	T10CA010	BLADE, ANGLE, HYDR, FOR D6	1.62	0.58		0.0	1.77			4.05	HR	224
MIL	T15CA003	DOZER,CWLR,D-3C,PS,(ADD BLADE)	3.51	1.39	2.14	0.7	6.14			13.94	HR	60
MIL	T15CA010	DOZER,CWLR,D-6H,PS,(ADD BLADE)	10.34	4.09	5.28	1.9	18.09			39.69	HR	224
MIL	T40XX010	TRUCK OPT,REAR DUMP BODY, 12 CY	1.15	0.34		0.0	1.11			2.69	HR	417
MIL	T50GM016	TRK, HWY, 3 AXLE, 41000 GVW, 6X4	4.17	1.32	7.46	2.0	3.69	1.29	0.19	20.21	HR	417
MIL	XMIXX020	Small Tools	0.46	0.17	0.13	0.0	0.57			1.39	HR	62

** PROJECT SETTINGS **

ESTIMATE TYPE : A-Crews with Auto Reprice

SALES TAX : 7.80%

DATE OF ESCALATION SCHEDULE : 10/01/93

PROJECT DIRECT COST COLUMNS

Col Type	H	L	E	M	U
Rep Width	8	10	10	12	10
Title	MHRS	LABR	EQUIP	MAT	OTHER

PROJECT INDIRECT COST COLUMNS

Col Type	O	U	P	B	U
Rep Width	9	9	9	9	9
Title	FOOH	HOOH	PROF	BOND	B&O TAX

PROJECT OWNER COST COLUMNS

Col Type	U	U	X	X	X
Rep Width	12	12	0	0	0
Title	S & A	CONTG	(Unused)	(Unused)	(Unused)

PROJECT BREAKDOWN

PROJECT ID	Length	Trail Sep	Level Title	2nd View Order
Level 1 ID :	2	-	WastSite	0
Level 2 ID :	2		Feature	0
Level 3 ID :	2		SubFeat	0
Level 4 ID :	2		CostL1	0
Level 5 ID :	4		CostL2	0
Level 6 ID :	4		CostL3	0

Owner Cost Level : 1

** PROJECT SETTINGS **

2ND VIEW COLUMNS
Quantity Column Width : 10

Col Type	X	X	X	X	X
Rep Width	0	0	0	0	0
Title	(Unused)	(Unused)	(Unused)	(Unused)	(Unused)
Shadow	X	X	X	X	X

DETAIL REPORT FORMATTING

PAGE OPTIONS
Page Break Levels : 2
Table of Contents Levels : 3

		0	1	2	3	4	5	6	7
ROW OPTIONS	Print Titles at Levels :		Y	Y	Y	Y	Y	Y	
	Print Totals at Levels :		Y	Y	Y	Y	Y	Y	
	Print Notes at Levels :	Y	Y	Y	Y	Y	Y	Y	Y
	Print Unit Cost Row :	Y							
	Print Page Footer :	N							
	Show Cost Codes :	Y							
COLUMNS OPTIONS	Print Crew Id :	Y							
	Crew Output :	Y							
	Unit Cost :	Y							
UPB TITLES	No. of Levels to Print :	0							
	Bracket Titles With :	- :							
	Include titles Notes :	Y							

** PROJECT SETTINGS **

OTHER REPORT FORMATTING

COLUMN TITLES FOR SUMMARY REPORTS

Column 1 FOOH : JOB OFFICE OVERHEAD
Column 2 HOOH : HOME OFFICE OVERHEAD
Column 3 PROF : PROFIT
Column 4 BOND : PERFORMANCE BOND
Column 5 B&O TAX : B & O AND OTHER TAXES

Column 1 S & A : S & A
Column 2 CONTG : CONTINGENCY
Column 3 (Unused) :
Column 4 (Unused) :
Column 5 (Unused) :

STANDARD COLUMN WIDTHS

Quantity Columns : 10
Total cost Columns : 12
Unit Cost Columns : 12

SUMMARY FEATURES

Round Totals Column : T-Tens
Contingency Notes : Yes
Show Project Totals : Yes

REPORT SELECTION

Project Settings : Y
Contractor Settings : Y
Link Listing : N

Measurement Units : Original

	REPORT FORMAT TYPE			FOR LEVEL (S)
	Direct	Indirect	Owner	0 1 2 3 4 5 6
Detail :	Y			
Project :	N	Y	Y	Y Y N N N N
Contractor :	N	N		N N N N N N N
Division :	N	N	N	Y N N N N N N
System :	N	N	N	Y N N N N N N
2nd View :	N			
Crew :	Y			Y N N N N N N
Labor :	Y			
Equipment :	Y			

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
Project Information Record							
0A MOBILIZATION/DEMOB & PREPWORK							
S & A	P		20.00				
CONTINGENCY	P		0.00				
0A-01 MOBILIZATION AND PREPATORY WORK							
0A-01 01 MOB OF EQUIPMENT & PERSONNEL							
0A-01 01 01 Mob of Equipment & Facilities							
S & A	O						
CONTINGENCY	P		20.00				
0A-01 03 SETUP/CONSTRUCT TEMP FACILITIES							
0A-01 03 01 TRAILERS AND BUILDINGS							
S & A	O						
CONTINGENCY	P		25.00				
0A-01 03 02 DECONTAMINATION FACILITIES							
0A-01 03 02 01 Personnel Decon Facilities							
S & A	O						
CONTINGENCY	P		20.00				
0A-01 03 02 02 Equip/Vehicle Decon Facilities							
S & A	O						
CONTINGENCY	P		0.00				
0A-21 DEMOBILIZATION							
0A-21 04 DEMOB OF EQUIPMENT & PERSONNEL							
0A-21 04 01 Demob Equipment/Facilities							
S & A	O						
CONTINGENCY	P		15.00				
0B COE QA/SAFETY MONITORING							
S & A	P		20.00				
CONTINGENCY	P		20.00				
0B-91 QA/Safety Monitoring							
0B-91 01 QA/Safety Monitoring							
S & A	O						
CONTINGENCY	O						
AA Radar Berm & Pads							
S & A	P		20.00				
CONTINGENCY	P		0.00				
AA-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AA-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AA-02 06 01 SURFACE SOIL							
AA-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AA-08 SOLIDS COLLECTION & CONTAINMENT							
AA-08 01 EXCAVATION							
AA-08 01 01 Excav/Load Cont. Soil & Waste							
	S & A	O					
	CONTINGENCY	P	35.00				
AA-08 01 02 Transport Cont. Soils, Arlington							
	S & A	O					
	CONTINGENCY	P	25.00				
AA-08 01 03 PPEquip, Modified Class D							
	S & A	O					
	CONTINGENCY	P	20.00				
AA-08 01 04 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	25.00				
AA-14 THERMAL TREATMENT							
AA-14 01 INCINERATION							
AA-14 01 01 SOLIDS PREPARATION AND HANDLING							
AA-14 01 01 01 On-site Incineration							
AA-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
AA-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
AA-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				
AA-14 01 01 01 02B On-site Incineration							
	S & A	O					
	CONTINGENCY	P	30.00				
AA-14 01 01 01 02C Disposal, On-site							
	S & A	O					
	CONTINGENCY	P	30.00				
AB H-52-C Surface Gas Tank Storage							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AB-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AB-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AB-02 06 01 SURFACE SOIL							

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AB-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
AB-14 THERMAL TREATMENT							
AB-14 01 INCINERATION							
AB-14 01 01 SOLIDS PREPARATION AND HANDLING							
AB-14 01 01 01 On-site Incineration							
AB-14 01 01 01 01 PPEquip, Class D							
S & A	O						
CONTINGENCY	P		25.00				
AB-14 01 01 01 03 Plastic Cover, Excavation Area							
S & A	O						
CONTINGENCY	O						
AB-14 01 01 01 02A Excavate, haul to Incinerator							
S & A	O						
CONTINGENCY	P		30.00				
AB-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
AB-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				
AC Control Center disposal pits (4)							
S & A	P		20.00				
CONTINGENCY	P		0.00				
AC-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AC-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AC-02 06 01 SURFACE SOIL							
AC-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
AC-08 SOLIDS COLLECTION & CONTAINMENT							
AC-08 01 EXCAVATION							
AC-08 01 01 Excav/Load Cont. Soil & Waste							
S & A	O						
CONTINGENCY	P		35.00				
AC-08 01 02 Transport Cont. Soils, Arlington							
S & A	O						
CONTINGENCY	P		25.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AC-08 01 03 PPEquip, Modified Class D							
	S & A	O					
	CONTINGENCY	P	20.00				
AC-08 01 04 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	25.00				
AD BLDG 6652-C, Abandoned USTs (5)							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AD-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AD-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AD-02 06 01 SURFACE SOIL							
AD-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	15.00				
AD-02 11 GEOTECHNICAL TESTING							
AD-02 11 01 GEOTECH TEST, Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
AD-10 TANKS/MISC DEMOLITION & REMOVAL							
AD-10 02 TANK REMOVAL							
AD-10 02 01 UST Tank Excavation & Removal							
	S & A	O					
	CONTINGENCY	P	30.00				
AD-10 02 04 PPEquip, Modified Class D							
	S & A	O					
	CONTINGENCY	P	20.00				
AD-10 02 05 Site Re-grading							
	S & A	O					
	CONTINGENCY	P	15.00				
AD-14 THERMAL TREATMENT							
AD-14 01 INCINERATION							
AD-14 01 01 SOLIDS PREPARATION AND HANDLING							
AD-14 01 01 01 On-site Incineration							
AD-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
AD-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AD-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AD-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AD-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AE Pumphouse Disposal Slope						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AE-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AE-02 06 SAMPLING SOIL, SED & SOLID WASTE						
AE-02 06 01 SURFACE SOIL						
AE-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AE-14 THERMAL TREATMENT						
AE-14 01 INCINERATION						
AE-14 01 01 SOLIDS PREPARATION AND HANDLING						
AE-14 01 01 01 On-site Incineration						
AE-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AE-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AE-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AE-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AE-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AF Pumphouse Latine, 275 Gal tank						
S & A	P	20.00				
CONTINGENCY	P	0.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AF-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AF-02 06 SAMPLING SOIL, SED & SOLID WASTE						
AF-02 06 01 SURFACE SOIL						
AF-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AF-14 THERMAL TREATMENT						
AF-14 01 INCINERATION						
AF-14 01 01 SOLIDS PREPARATION AND HANDLING						
AF-14 01 01 01 On-site Incineration						
AF-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AF-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AF-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AF-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AF-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AG Pumphouse Latrine, 1500 Gal tank						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AG-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AG-02 06 SAMPLING SOIL, SED & SOLID WASTE						
AG-02 06 01 SURFACE SOIL						
AG-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AG-14 THERMAL TREATMENT						
AG-14 01 INCINERATION						
AG-14 01 01 SOLIDS PREPARATION AND HANDLING						
AG-14 01 01 01 On-site Incineration						
AG-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AG-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	0					
CONTINGENCY	0					
AG-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	0					
CONTINGENCY	P	30.00				
AG-14 01 01 01 02B On-site Incineration						
S & A	0					
CONTINGENCY	P	30.00				
AG-14 01 01 01 02C Disposal, On-site						
S & A	0					
CONTINGENCY	P	30.00				
AH 6652-C SSL Active Septic System						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AH-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AH-02 06 SAMPLING SOIL & SEDIMENT						
AH-02 06 01 SURFACE SOIL						
AH-02 06 01 02 Confirmatory Samples & Analyses						
S & A	0					
CONTINGENCY	P	15.00				
AH-02 06 02 VADOSE ZONE SAMPLING, Soil Gas						
S & A	0					
CONTINGENCY	0					
AH-14 THERMAL TREATMENT						
AH-14 01 INCINERATION						
AH-14 01 01 SOLIDS PREPARATION AND HANDLING						
AH-14 01 01 01 On-site Incineration						
AH-14 01 01 01 01 PPEquip, Class D						
S & A	0					
CONTINGENCY	P	25.00				
AH-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	0					
CONTINGENCY	0					
AH-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	0					
CONTINGENCY	P	30.00				
AH-14 01 01 01 02B On-site Incineration						
S & A	0					
CONTINGENCY	P	30.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AH-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AI 6652-C SSI Inactive Septic Tank						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AI-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AI-02 06 SAMPLING SOIL & SEDIMENT						
AI-02 06 01 SURFACE SOIL						
AI-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AI-02 06 02 VADOSE ZONE SAMPLING, Soil Gas						
S & A	O					
CONTINGENCY	O					
AI-14 THERMAL TREATMENT						
AI-14 01 INCINERATION						
AI-14 01 01 SOLIDS PREPARATION AND HANDLING						
AI-14 01 01 01 On-site Incineration						
AI-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AI-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AI-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AI-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AI-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AJ 6652-G ALE F.S. Bldg Septic Tank						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AJ-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AJ-02 06 SAMPLING SOIL & SEDIMENT						

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AJ-02 06 01 SURFACE SOIL							
AJ-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	15.00				
AJ-02 06 02 VADOSE ZONE SAMPLING, Soil Gas							
	S & A	O					
	CONTINGENCY	O					
AJ-14 THERMAL TREATMENT							
AJ-14 01 INCINERATION							
AJ-14 01 01 SOLIDS PREPARATION AND HANDLING							
AJ-14 01 01 01 On-site Incineration							
AJ-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
AJ-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
AJ-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				
AJ-14 01 01 01 02B On-site Incineration							
	S & A	O					
	CONTINGENCY	P	30.00				
AJ-14 01 01 01 02C Disposal, On-site							
	S & A	O					
	CONTINGENCY	P	30.00				
AK Mound Site NW of BLDG. 6652-G							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AK-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AK-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AK-02 06 01 SURFACE SOIL							
AK-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	15.00				
AK-02 11 GEOTECHNICAL TESTING							
AK-02 11 01 GEOTEC TESTG, Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AK-14 THERMAL TREATMENT						
AK-14 01 INCINERATION						
AK-14 01 01 SOLIDS PREPARATION AND HANDLING						
AK-14 01 01 01 On-site Incineration						
AK-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AK-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AK-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AK-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AK-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AL 6652-I ALE, HQTRs Septic Tank &						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AL-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AL-02 06 SAMPLING SOIL & SEDIMENT						
AL-02 06 01 SURFACE SOIL						
AL-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AL-02 06 02 VADOSE ZONE SAMPLING, Soil Gas						
S & A	O					
CONTINGENCY	O					
AL-14 THERMAL TREATMENT						
AL-14 01 INCINERATION						
AL-14 01 01 SOLIDS PREPARATION AND HANDLING						
AL-14 01 01 01 On-site Incineration						
AL-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AL-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AL-14 01 01 01 02A Excavate, haul to Incinerator							
S & A	O						
CONTINGENCY	P		30.00				
AL-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
AL-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				
AM Abandoned UST, 6652-, 6 tanks							
S & A	P		20.00				
CONTINGENCY	P		0.00				
AM-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AM-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AM-02 06 01 SURFACE SOIL							
AM-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
AM-02 11 GEOTECHNICAL TESTING							
AM-02 11 01 GEOTECH TEST, Geophysical Survey							
S & A	O						
CONTINGENCY	P		25.00				
AM-10 TANKS/MISC DEMOLITION & REMOVAL							
AM-10 02 TANK REMOVAL							
AM-10 02 01 UST Tank Excavation & Removal							
S & A	O						
CONTINGENCY	P		30.00				
AM-10 02 04 PPEquip, Modified Class D							
S & A	O						
CONTINGENCY	P		20.00				
AM-10 02 05 Site Re-grading							
S & A	O						
CONTINGENCY	P		15.00				
AM-14 THERMAL TREATMENT							
AM-14 01 INCINERATION							
AM-14 01 01 SOLIDS PREPARATION AND HANDLING							
AM-14 01 01 01 On-site Incineration							
AM-14 01 01 01 01 PPEquip, Class D							
S & A	O						
CONTINGENCY	P		25.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AM-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AM-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AM-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AM-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AN 6652-G UST, 2,000 Gal fuel oil						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AN-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AN-02 06 SAMPLING SOIL, SED & SOLID WASTE						
AN-02 06 01 SURFACE SOIL						
AN-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AN-10 TANKS/MISC DEMOLITION & REMOVAL						
AN-10 02 TANK REMOVAL						
AN-10 02 01 UST Tank Excavation & Removal						
S & A	O					
CONTINGENCY	P	30.00				
AN-10 02 04 PPEquip, Modified Class D						
S & A	O					
CONTINGENCY	P	20.00				
AN-10 02 05 Site Re-grading						
S & A	O					
CONTINGENCY	P	15.00				
AN-14 THERMAL TREATMENT						
AN-14 01 INCINERATION						
AN-14 01 01 SOLIDS PREPARATION AND HANDLING						
AN-14 01 01 01 On-site Incineration						
AN-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AN-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AN-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AN-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AN-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AO Missile Bunker sump, undrgnd fac						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AO-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AO-02 06 SAMPLING SOIL, SED & SOLID WASTE						
AO-02 06 01 SURFACE SOIL						
AO-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AO-02 11 GEOTECHNICAL TESTING						
AO-02 11 01 GEOTEC TESTG, Geophysical Survey						
S & A	O					
CONTINGENCY	P	25.00				
AP Missile Bunker Drainfield Active						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AP-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AP-02 06 SAMPLING SOIL & SEDIMENT						
AP-02 06 01 SURFACE SOIL						
AP-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AP-02 06 02 VADOSE ZONE SAMPLING, Soil Gas						
S & A	O					
CONTINGENCY	O					
AP-02 11 GEOTECHNICAL TESTING						
AP-02 11 01 GEOTEC TESTG, Geophysical Survey						
S & A	O					
CONTINGENCY	P	25.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AP-14 THERMAL TREATMENT						
AP-14 01 INCINERATION						
AP-14 01 01 SOLIDS PREPARATION AND HANDLING						
AP-14 01 01 01 On-site Incineration						
AP-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AP-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AP-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AP-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AP-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AQ Main Entrance Stained Soil						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AQ-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AQ-02 06 SAMPLING SOIL & SEDIMENT						
AQ-02 06 01 SURFACE SOIL						
AQ-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AQ-14 THERMAL TREATMENT						
AQ-14 01 INCINERATION						
AQ-14 01 01 SOLIDS PREPARATION AND HANDLING						
AQ-14 01 01 01 On-site Incineration						
AQ-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AQ-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AQ-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AQ-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AQ-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AR Missile Bunker Discharge Ditch						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AR-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AR-02 06 SAMPLING SOIL & SEDIMENT						
AR-02 06 01 SURFACE SOIL						
AR-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
AR-14 THERMAL TREATMENT						
AR-14 01 INCINERATION						
AR-14 01 01 SOLIDS PREPARATION AND HANDLING						
AR-14 01 01 01 On-site Incineration						
AR-14 01 01 01 01 PPEquip, Class D						
S & A	O					
CONTINGENCY	P	25.00				
AR-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	O					
CONTINGENCY	O					
AR-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	O					
CONTINGENCY	P	30.00				
AR-14 01 01 01 02B On-site Incineration						
S & A	O					
CONTINGENCY	P	30.00				
AR-14 01 01 01 02C Disposal, On-site						
S & A	O					
CONTINGENCY	P	30.00				
AS JP4 Fuel Pad						
S & A	P	20.00				
CONTINGENCY	P	0.00				
AS-02 MONITOR, SAMPLE, TEST, ANALYSIS						
AS-02 06 SAMPLING SOIL, SED & SOLID WASTE						

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AS-02 06 01 SURFACE SOIL							
AS-02 06 01 02 Confirmatory Samples & Analyses							
S & A		O					
CONTINGENCY		P	15.00				
AS-14 THERMAL TREATMENT							
AS-14 01 INCINERATION							
AS-14 01 01 SOLIDS PREPARATION AND HANDLING							
AS-14 01 01 01 On-site Incineration							
AS-14 01 01 01 01 PPEquip, Class D							
S & A		O					
CONTINGENCY		P	25.00				
AS-14 01 01 01 03 Plastic Cover, Excavation Area							
S & A		O					
CONTINGENCY		O					
AS-14 01 01 01 02A Excavate, haul to Incinerator							
S & A		O					
CONTINGENCY		P	30.00				
AS-14 01 01 01 02B On-site Incineration							
S & A		O					
CONTINGENCY		P	30.00				
AS-14 01 01 01 02C Disposal, On-site							
S & A		O					
CONTINGENCY		P	30.00				
AT NIKE BASE LANDFILL							
S & A		P	20.00				
CONTINGENCY		P	0.00				
AT-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AT-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AT-02 06 01 SURFACE SOIL							
AT-02 06 01 01 Soil Samples & Analyses							
S & A		O					
CONTINGENCY		P	20.00				
AT-02 06 02 VADOSE ZONE SAMPLING, Soil Gas							
S & A		O					
CONTINGENCY		P	25.00				
AT-02 06 91 TEST PIT							
S & A		O					
CONTINGENCY		P	30.00				
AT-02 11 GEOTECHNICAL TESTING							

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AT-02 11 01 GEOTEC TESTG, Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
AU Missile Bunker Landfill							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AU-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AU-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AU-02 06 01 SURFACE SOIL							
AU-02 06 01 01 Soil Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				
AU-02 06 02 VADOSE ZONE SAMPLING, Soil Gas							
	S & A	O					
	CONTINGENCY	P	25.00				
AU-02 06 91 TEST PIT							
	S & A	O					
	CONTINGENCY	P	30.00				
AU-02 11 GEOTECHNICAL TESTING							
AU-02 11 01 GEOTEC TESTG, Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
AV Missile Refueling Area Berm							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AV-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AV-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AV-02 06 01 SURFACE SOIL							
AV-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	15.00				
AV-14 THERMAL TREATMENT							
AV-14 01 INCINERATION							
AV-14 01 01 SOLIDS PREPARATION AND HANDLING							
AV-14 01 01 01 On-site Incineration							
AV-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
AV-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AV-14 01 01 01 02A Excavate, haul to Incinerator							
S & A		O					
CONTINGENCY		P	30.00				
AV-14 01 01 01 02B On-site Incineration							
S & A		O					
CONTINGENCY		P	30.00				
AV-14 01 01 01 02C Disposal, On-site							
S & A		O					
CONTINGENCY		P	30.00				
AW Acid Neutralization Pit							
S & A		P	20.00				
CONTINGENCY		P	0.00				
AW-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AW-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AW-02 06 01 SURFACE SOIL							
AW-02 06 01 02 Confirmatory Samples & Analyses							
S & A		O					
CONTINGENCY		P	15.00				
AW-08 SOLIDS COLLECTION & CONTAINMENT							
AW-08 01 EXCAVATION							
AW-08 01 01 Excav/Load Cont. Soil & Waste							
S & A		O					
CONTINGENCY		P	35.00				
AW-08 01 02 Transport Cont. Soils, Arlington							
S & A		O					
CONTINGENCY		P	25.00				
AW-08 01 03 PPEquip, Modified Class D							
S & A		O					
CONTINGENCY		P	20.00				
AW-08 01 04 Site Re-grading							
S & A		O					
CONTINGENCY		P	25.00				
AX Missile Refueling JP-4 Fuel Area							
S & A		P	20.00				
CONTINGENCY		P	0.00				
AX-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AX-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AX-02 06 01 SURFACE SOIL							
AX-02 06 01 02 Confirmatory Samples & Analyses							
S & A		O					
CONTINGENCY		P	15.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AX-14 THERMAL TREATMENT							
AX-14 01 INCINERATION							
AX-14 01 01 SOLIDS PREPARATION AND HANDLING							
AX-14 01 01 01 On-site Incineration							
AX-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				
AX-14 01 01 01 03 Plastic Cover, Excavation Area							
	S & A	O					
	CONTINGENCY	O					
AX-14 01 01 01 02A Excavate, haul to Incinerator							
	S & A	O					
	CONTINGENCY	P	30.00				
AX-14 01 01 01 02B On-site Incineration							
	S & A	O					
	CONTINGENCY	P	30.00				
AX-14 01 01 01 02C Disposal, On-site							
	S & A	O					
	CONTINGENCY	P	30.00				
AY M.M. & A.A., Inactive Septic Sys							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
AY-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AY-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AY-02 06 01 SURFACE SOIL							
AY-02 06 01 01 Soil Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				
AY-02 06 02 VADOSE ZONE SAMPLING, Soil Gas							
	S & A	O					
	CONTINGENCY	P	25.00				
AY-02 11 GEOTECHNICAL TESTING							
AY-02 11 01 GEOTEC TESTG, Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
AY-14 THERMAL TREATMENT							
AY-14 01 INCINERATION							
AY-14 01 01 SOLIDS PREPARATION AND HANDLING							
AY-14 01 01 01 On-site Incineration							
AY-14 01 01 01 01 PPEquip, Class D							
	S & A	O					
	CONTINGENCY	P	25.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AY-14 01 01 01 03 Plastic Cover, Excavation Area							
S & A	O						
CONTINGENCY	O						
AY-14 01 01 01 02A Excavate, haul to Incinerator							
S & A	O						
CONTINGENCY	P		30.00				
AY-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
AY-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				
AZ M.M. & A.A.,275Gal fuel oil Tank							
S & A	P		20.00				
CONTINGENCY	P		0.00				
AZ-02 MONITOR, SAMPLE, TEST, ANALYSIS							
AZ-02 06 SAMPLING SOIL, SED & SOLID WASTE							
AZ-02 06 01 SURFACE SOIL							
AZ-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
AZ-10 TANKS/MISC DEMOLITION & REMOVAL							
AZ-10 02 TANK REMOVAL							
AZ-10 02 01 UST Tank Excavation & Removal							
S & A	O						
CONTINGENCY	P		30.00				
AZ-10 02 04 PPEquip, Modified Class D							
S & A	O						
CONTINGENCY	P		20.00				
AZ-10 02 05 Site Re-grading							
S & A	O						
CONTINGENCY	P		15.00				
AZ-14 THERMAL TREATMENT							
AZ-14 01 INCINERATION							
AZ-14 01 01 SOLIDS PREPARATION AND HANDLING							
AZ-14 01 01 01 On-site Incineration							
AZ-14 01 01 01 01 PPEquip, Class D							
S & A	O						
CONTINGENCY	P		25.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
AZ-14 01 01 01 03 Plastic Cover, Excavation Area						
S & A	0					
CONTINGENCY	0					
AZ-14 01 01 01 02A Excavate, haul to Incinerator						
S & A	0					
CONTINGENCY	P	30.00				
AZ-14 01 01 01 02B On-site Incineration						
S & A	0					
CONTINGENCY	P	30.00				
AZ-14 01 01 01 02C Disposal, On-site						
S & A	0					
CONTINGENCY	P	30.00				
BA M.M. & A.A., Acid Storage Shed						
S & A	P	20.00				
CONTINGENCY	P	0.00				
BA-02 MONITOR, SAMPLE, TEST, ANALYSIS						
BA-02 06 SAMPLING SOIL, SED & SOLID WASTE						
BA-02 06 01 SURFACE SOIL						
BA-02 06 01 02 Confirmatory Samples & Analyses						
S & A	0					
CONTINGENCY	P	15.00				
BA-08 SOLIDS COLLECTION & CONTAINMENT						
BA-08 01 EXCAVATION						
BA-08 01 01 Excav/Load Cont. Soil & Waste						
S & A	0					
CONTINGENCY	P	35.00				
BA-08 01 02 Transport Cont. Soils, Arlington						
S & A	0					
CONTINGENCY	P	25.00				
BA-08 01 03 PPEquip, Modified Class D						
S & A	0					
CONTINGENCY	P	20.00				
BA-08 01 04 Site Re-grading						
S & A	0					
CONTINGENCY	P	25.00				
BB M.M. & A.A., Paint Shed						
S & A	P	20.00				
CONTINGENCY	P	0.00				

** OWNER SETTINGS **

	AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
BB-02 MONITOR, SAMPLE, TEST, ANALYSIS						
BB-02 06 SAMPLING SOIL, SED & SOLID WASTE						
BB-02 06 01 SURFACE SOIL						
BB-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
BB-08 SOLIDS COLLECTION & CONTAINMENT						
BB-08 01 EXCAVATION						
BB-08 01 01 Excav/Load Cont. Soil & Waste						
S & A	O					
CONTINGENCY	P	35.00				
BB-08 01 02 Transport Cont. Soils, Arlington						
S & A	O					
CONTINGENCY	P	25.00				
BB-08 01 03 PPEquip, Modified Class D						
S & A	O					
CONTINGENCY	P	20.00				
BB-08 01 04 Site Re-grading						
S & A	O					
CONTINGENCY	P	25.00				
BC Flammable Storage Block Shed						
S & A	P	20.00				
CONTINGENCY	P	0.00				
BC-02 MONITOR, SAMPLE, TEST, ANALYSIS						
BC-02 06 SAMPLING SOIL, SED & SOLID WASTE						
BC-02 06 01 SURFACE SOIL						
BC-02 06 01 02 Confirmatory Samples & Analyses						
S & A	O					
CONTINGENCY	P	15.00				
BC-08 SOLIDS COLLECTION & CONTAINMENT						
BC-08 01 EXCAVATION						
BC-08 01 01 Excav/Load Cont. Soil & Waste						
S & A	O					
CONTINGENCY	P	35.00				
BC-08 01 02 Transport Cont. Soils, Arlington						
S & A	O					
CONTINGENCY	P	25.00				
BC-08 01 03 PPEquip, Modified Class D						
S & A	O					
CONTINGENCY	P	20.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
BC-08 01 04 Site Re-grading							
S & A	O						
CONTINGENCY	P		25.00				
BD M.M. & A.A., Dry Well							
S & A	P		20.00				
CONTINGENCY	P		0.00				
BD-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BD-02 06 SAMPLING SOIL, SED & SOLID WASTE							
BD-02 06 01 SURFACE SOIL							
BD-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
BD-08 SOLIDS COLLECTION & CONTAINMENT							
BD-08 01 EXCAVATION							
BD-08 01 01 Excav/Load Cont. Soil & Waste							
S & A	O						
CONTINGENCY	P		35.00				
BD-08 01 02 Transport Cont. Soils, Arlington							
S & A	O						
CONTINGENCY	P		25.00				
BD-08 01 03 PPEquip, Modified Class D							
S & A	O						
CONTINGENCY	P		20.00				
BD-08 01 04 Site Re-grading							
S & A	O						
CONTINGENCY	P		25.00				
BE Generator Building							
S & A	P		20.00				
CONTINGENCY	P		0.00				
BE-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BE-02 06 SAMPLING SOIL & SEDIMENT							
BE-02 06 01 SURFACE SOIL							
BE-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
BE-10 STRUCTURES/MISC DEMO & REMOVAL							
BE-10 02 TANK REMOVAL							
BE-10 02 01 TANK REMOVAL							
S & A	O						
CONTINGENCY	P		30.00				

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
BE-10 03 STRUCTURE REMOVAL							
BE-10 03 01 STRUCTURE REMOVAL							
	S & A	O					
	CONTINGENCY	P	50.00				
BE-10 04 ASBESTOS ABATEMENT							
BE-10 04 01 ASBESTOS ABATEMENT							
	S & A	O					
	CONTINGENCY	P	20.00				
BF Horseshoe Site							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
BF-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BF-02 06 SAMPLING SOIL, SED & SOLID WASTE							
BF-02 06 01 SURFACE SOIL							
BF-02 06 01 01 Soil Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	20.00				
BF-02 06 02 VADOSE ZONE SAMPLING, Soil Gas							
	S & A	O					
	CONTINGENCY	P	25.00				
BF-02 06 91 TEST PIT							
	S & A	O					
	CONTINGENCY	P	30.00				
BF-02 11 GEOTECHNICAL TESTING							
BF-02 11 01 GEOTEC TESTG, Geophysical Survey							
	S & A	O					
	CONTINGENCY	P	25.00				
BG H-52-L Surface Gas Tank Area							
	S & A	P	20.00				
	CONTINGENCY	P	0.00				
BG-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BG-02 06 SAMPLING SOIL & SEDIMENT							
BG-02 06 01 SURFACE SOIL							
BG-02 06 01 02 Confirmatory Samples & Analyses							
	S & A	O					
	CONTINGENCY	P	15.00				
BG-14 THERMAL TREATMENT							
BG-14 01 INCINERATION							
BG-14 01 01 SOLIDS PREPARATION AND HANDLING							
BG-14 01 01 01 On-site Incineration							

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
BG-14 01 01 01 01 PPEquip, Class D							
S & A	O						
CONTINGENCY	P		25.00				
BG-14 01 01 01 03 Plastic Cover, Excavation Area							
S & A	O						
CONTINGENCY	O						
BG-14 01 01 01 02A Excavate, haul to Incinerator							
S & A	O						
CONTINGENCY	P		30.00				
BG-14 01 01 01 02B On-site Incineration							
S & A	O						
CONTINGENCY	P		30.00				
BG-14 01 01 01 02C Disposal, On-site							
S & A	O						
CONTINGENCY	P		30.00				
BH Elevator Doors							
S & A	P		20.00				
CONTINGENCY	P		0.00				
BH-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BH-02 06 SAMPLING SOIL, SED & SOLID WASTE							
BH-02 06 01 SURFACE SOIL							
BH-02 06 01 02 Confirmatory Samples & Analyses							
S & A	O						
CONTINGENCY	P		15.00				
BH-10 STRUCTURES/MISC DEMO & REMOVAL							
BH-10 07 MISCELLANEOUS ITEMS							
BH-10 07 01 MISCELLANEOUS ITEMS							
S & A	O						
CONTINGENCY	O						
BJ IU1 Characterization Well							
S & A	P		20.00				
CONTINGENCY	P		0.00				
BJ-02 MONITOR, SAMPLE, TEST, ANALYSIS							
BJ-02 04 MONITORING WELLS							
BJ-02 04 01 WELL DRILLING & CONSTRUCTION							
BJ-02 04 01 01 IU1, 4" D, Characterization Well							
S & A	O						
CONTINGENCY	P		20.00				
BJ-02 05 SAMPLING S.W./GROUND WATER/L.W.							

** OWNER SETTINGS **

		AMOUNT	PERCENT	*ESCALATN DATE* BEGIN	END	*ESCALATN INDEX* BEGIN	END
BJ-02 05 02 SOIL/GROUND WATER Sampling							
S & A	O						
CONTINGENCY	P		20.00				

** CONTRACTOR SETTINGS **

		AMOUNT	PCT	PCT S	RISK	DIFF	SIZE	PERIOD	INVEST	ASSIST	SUBCON
AA REMEDIAL GENERAL CONTRACTOR											
JOB OFFICE OVERHEAD	P		15.00								
HOME OFFICE OVERHEAD	P		5.00								
PROFIT	P		8.00								
PERFORMANCE BOND	C			(Class: B)							
B & O AND OTHER TAXES	P		1.00								
GS Geophysical Survey SubContractor											
JOB OFFICE OVERHEAD	P		0.00								
HOME OFFICE OVERHEAD	P		0.00								
PROFIT	P		0.00								
PERFORMANCE BOND	P		0.00								
B & O AND OTHER TAXES	P		0.00								
SG Soil Gas Survey SubContractor											
JOB OFFICE OVERHEAD	P		0.00								
HOME OFFICE OVERHEAD	P		0.00								
PROFIT	P		0.00								
PERFORMANCE BOND	P		0.00								
B & O AND OTHER TAXES	P		0.00								