

SUMMARY COST ESTIMATE SHEET

Page 1 of 1

Project WAG-S FS COST ESTIMATES

Type of Est. Planning

File No. 4951-4

Date 01/05/99

SOIL SITES: ARA-01, ARA-12, ARA-18, ARA-23, P8F-16, ARA-25

Prep'd By TES/KLS

Location ARA - INEEL

Checked By *[Signature]*

Requester F. L. WEBBER

ACCT. NO.	DESCRIPTION	ALTERNATIVE #1	ALTERNATIVE #2	ALTERNATIVE #3A	ALTERNATIVE #3B	ALTERNATIVE #4A	ALTERNATIVE #4B	ALTERNATIVE #6A	ALTERNATIVE #6B
		NO ACTION	LIMITED ACTION	EXCAVATION, CONSOL. AND CONTAINMENT USING NATIVE SOIL CAP	EXCAVATION, CONSOL. AND CONTAINMENT USING ENGINEERED BARRIER	REMOVAL AND DISPOSAL AT INEEL	REMOVAL AND DISPOSAL OFF INEEL	REMOVAL AND EX SITU TREATMENT DISPOSAL AT INEEL	REMOVAL AND EX SITU TREATMENT DISPOSAL OFF INEEL
	CAPITAL COST SUBTOTAL	809,500	1,501,510	8,720,889	8,073,548	11,466,595	23,992,142	16,310,501	22,593,701
	Contingency @ 30%	242,850	450,453	2,616,267	2,422,064	3,439,978	7,197,643	4,893,150	6,778,110
	TOTAL CAPITAL COST IN FY98 DOLLARS	1,052,350	1,951,963	11,337,156	10,495,612	14,906,573	31,189,785	21,203,651	29,371,811
	TOTAL CAPITAL COST IN ESCALATED DOLLARS	1,111,906	2,057,983	12,371,086	11,447,459	16,276,673	34,100,212	23,166,345	32,107,197
	TOTAL CAPITAL COST IN NET PRESENT VALUE	999,981	1,858,100	10,498,463	9,722,938	13,796,742	28,836,026	19,614,936	27,159,094
	O&M COST SUBTOTAL	13,313,000	13,862,000	15,888,000	15,888,000	NA	NA	NA	NA
	Contingency @ 30%	3,993,900	4,158,600	4,766,400	4,766,400	NA	NA	NA	NA
	TOTAL O&M COST IN FY98 DOLLARS	17,306,900	18,020,600	20,654,400	20,654,400	NA	NA	NA	NA
	TOTAL O&M COST IN ESCALATED DOLLARS	104,618,837	108,980,083	132,433,268	132,433,268	NA	NA	NA	NA
	TOTAL O&M COST IN NET PRESENT VALUE	7,186,818	7,475,055	8,200,061	8,200,062	NA	NA	NA	NA
	TOTAL COST IN FY 98 DOLLARS	18,359,250	19,972,563	31,991,556	31,150,012	14,906,573	31,189,785	21,203,651	29,371,811
	TOTAL COST IN ESCALATED DOLLARS	105,730,743	111,038,048	144,804,334	143,880,727	16,276,673	34,100,212	23,166,345	32,107,197
	TOTAL PROJECT COST IN NET PRESENT VALUE	8,186,797	9,333,155	18,698,524	17,923,000	13,796,742	28,836,026	19,614,936	27,159,094

SUMMARY OF DETAILED COST ESTIMATE

Page 1 of 49

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
 Location ARA - INEEL
 Requester F. L. WEBBER

Type of Est. Planning

File N 4951-4

Date 01/05/99
 Prep'd By TES/KLS

ACCT. NO.	DESCRIPTION	ALTERNATIVE #1	ALTERNATIVE #2	ALTERNATIVE #3A	ALTERNATIVE #3B	ALTERNATIVE #4A	ALTERNATIVE #4B	ALTERNATIVE #5A	ALTERNATIVE #5B
		NO ACTION	LIMITED ACTION	EXCAVATION, CONSOL. AND CONTAINMENT USING NATIVE SOIL CAP	EXCAVATION, CONSOL. AND CONTAINMENT USING ENGINEERED BARRIER	REMOVAL AND DISPOSAL AT INEE	REMOVAL AND DISPOSAL OFF INEE	REMOVAL AND EX SITU TREATMENT DISPOSAL AT INEEL	REMOVAL AND EX SITU TREATMENT DISPOSAL OFF INEEL
ER1220	FFA/CO Management and Oversight								
	Program Management	125,000	125,000	375,000	375,000	375,000	375,000	375,000	375,000
	RA Document Preparation								
	RD/RA SOW	54,000	54,000	54,000	54,000	54,000	54,000	54,000	54,000
	RA Workplan	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000
	Packaging, Shipping, Trans. Documentation	N/A	N/A	48,000	48,000	48,000	48,000	48,000	48,000
	Remedial Action Report	48,000	48,000	48,000	48,000	48,000	48,000	48,000	48,000
	WAG-Wide RA - 5 Yr. Review	141,000	141,000	141,000	141,000	141,000	141,000	141,000	141,000
	RD Documentation Preparation								
	Safety Analysis Documentation (ASA & HSP)	100,500	100,500	100,500	100,500	100,500	100,500	100,500	100,500
	Sampling and Analysis Plan	108,000	108,000	108,000	108,000	108,000	108,000	108,000	108,000
	Pre-Final Inspection Report	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
ER1210	Remedial Design								
	Added Institutional Controls - 5 Yr. Review For 100 Years	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000
	Title Design Construction Document Package	N/A	52,800	202,200	237,200	70,800	70,800	378,800	378,800
ER1230	Remedial Action - Construction Subcontract								
	Site Characterization	130,500	130,500	130,500	130,500	1,272,900	1,762,500	701,700	946,500
	Construction Subcontract	N/A	510,510	6,581,578	5,975,819	8,440,471	20,478,418	12,507,475	18,545,875
	Project/Construction Management	N/A	128,700	829,611	753,229	705,424	705,424	1,745,525	1,745,525
	TOTAL CAPITAL COST	808,500	1,601,510	8,720,889	8,073,848	11,468,895	23,992,142	16,310,501	22,593,701
ER1230	Remedial Action - Operations (100 Year Duration)								
	Program Management	3,385,000	3,385,000	3,385,000	3,385,000	NA	NA	NA	NA
	WAG-Wide RA - 5 Yr. Review For 100 Years	3,243,000	3,243,000	3,243,000	3,243,000	NA	NA	NA	NA
	Added Institutional Controls - 5 Yr. Review For 100 Years	640,000	640,000	640,000	640,000	NA	NA	NA	NA
	Construction ICPP Caretaker/Maintenance	2,010,000	2,559,000	4,585,000	4,585,000	NA	NA	N/A	N/A
	Operations, Maintenance, Materials, and Disposal	N/A	N/A	N/A	N/A	NA	NA	N/A	N/A
ER2000	D&D of Facilities	N/A	N/A	N/A	N/A	NA	NA	N/A	N/A
ER1310	Surveillance and Monitoring	4,035,000	4,035,000	4,035,000	4,035,000	NA	NA	N/A	N/A
	TOTAL OPERATIONS COST (100 YEARS)	13,313,000	13,862,000	15,888,000	15,888,000	NA	NA	NA	NA

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 1 - NO ACTION
EXIST INST. CONTROLS/MONITORING

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	FFA/CO Management and Oversight										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		640	640	75	48,000			48,000
	Coordination with Agency Participants		1 fte		320	320	75	24,000			24,000
	Cost and Schedule Control		1 fte		320	320	65	20,800			20,800
	Ensure Compliance of Gov't Regulation		1 fte		160	160	70	11,200			11,200
	Quarterly and Yearly Reviews		1 fte		160	160	65	10,400			10,400
	Audit Preparation and Coordination		1 fte		160	160	65	10,400			10,400
	Total Cost (Per Year)										124,800
	Total Cost (Per Year Rounded)										125,000
	Program Management - 1 Year Duration		1 yr	125,000					125,000		125,000
	RA Document Preparation										
	RD/RA SOW										
	PreDesign Studies/Preliminary Scoping		3 fte		80	240	75	18,000			18,000
	Design Criteria		1 fte		40	40	75	3,000			3,000
	RD/RA Document Preparation		1 fte		80	80	75	6,000			6,000
	Reviews and Comment Resolution		1 fte		360	360	75	27,000			27,000
	RD/RA SOW Cost										54,000
	RA Workplan										
	Preliminary Scoping		1 fte		160	160	75	12,000			12,000
	RD/RA Document Preparation		1 fte		260	260	75	19,500			19,500
	Reviews and Comment Resolution		1 fte		420	420	75	31,500			31,500
	RA Workplan Cost										63,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 1 - NO ACTION
EXIST INST. CONTROLS/MONITORING

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RA Document Preparation (cont.)										
	Packaging, Shipping, Transportation Documentation										
	Sampling and Analysis		N/A								N/A
	Hazard Classification		N/A								N/A
	Selection and Procurement of Packaging		N/A								N/A
	Packaging, Shipping, Transportation Documentation Cost										N/A
	Remedial Action Report										
	RA Report Preparation		1 fte		320	320	75	24,000			24,000
	Reviews and Comment Resolution		1 fte		320	320	75	24,000			24,000
	Remedial Action Report Cost										48,000
	WAG-Wide RA 5 Yr. Review - (Cost includes (1) FTE For (1) yr for the Initial Review										
	RA Report Preparation		1 yr		1,440	1,440	75	108,000			108,000
	Reviews and Comment Resolution		1 yr		440	440	75	33,000			33,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										141,000
	RD Document Preparation										
	Safety Analysis Documentation (ASA & HSP)										
	Auditable Safety Analysis/Hazards Classification		2 fte		160	320	75	24,000			24,000
	Unresolved Safety Questions		2 fte		160	320	75	24,000			24,000
	Quality Assurance		1 fte		30	30	75	2,250			2,250
	Review & Comment Resolution		2 fte		335	670	75	50,250			50,250
	Safety Analysis Documentation Cost										100,500
	Sampling and Analysis Plan										
	Preliminary Scoping		1 fte		320	320	75	24,000			24,000
	Field Sampling Plan Preparation		1 fte		400	400	75	30,000			30,000
	Reviews and Comment Resolution		1 fte		720	720	75	54,000			54,000
	Sampling and Analysis Plan Cost										108,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 1 - NO ACTION
EXIST INST. CONTROLS/MONITORING

Type of Est. Planning File No. 4951-4 Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RD Document Preparation (cont.)										
	Pre-Final Inspection Report										
	Checklist Preparation		1 fte		40	40	75	3,000			3,000
	Reviews and Comment Resolution		1 fte		60	60	75	4,500			4,500
	Pre-Final Inspection Report Cost										7,500
	Remedial Design										
	Initial Review of Deed Restrictions with Governing Bodies and Public Comment										
	Legal Attorney and Env. Affairs at \$32K ea.		1 ea	32,000					32,000		32,000
	Deed Restrictions Cost										32,000
	Title Design Construction Document Package										
	Remedial Design Workplan										N/A
	Siting and Surveying										N/A
	Procurement Document Package										N/A
	Total Cost Title Design Construction Document Package										N/A
	Site Characterization - Including: Sample Collection Materials/Labor, Shipping, SMO TOS Preparation & Analysis Reporting, ERIS Quality Reporting										
	Assume a Total Allowance of 100 Samples for all Sites		100 smpls	1,000	4	400	75	30,000	100,000	500	130,500
										(Materials)	
	Construction Subcontract										
	6' h Security Fence w/Gates, Signage and Markers										N/A
	Surface Water Diversion Provision										N/A
	Total Subcontractor Direct Costs										N/A
	Subcontractor Overhead and Profit @ 30%										N/A
	Total Subcontractor Directs and Indirects										N/A
	Procurement Fee and G&A at Current Business Practices										N/A
	Total Subcontractor Costs										N/A
	Project/Construction Management										N/A

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-6 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 1 - NO ACTION
EXIST INST. CONTROLS/MONITORING

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P.H	MAT'L UNIT	MAT'L UT. COST	UNIT-LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
Remedial Action - Operations (100 Year Duration)											
Program Management											
	Coordination/Oversight of Technical Support		1 fte		200	200	75	15,000			15,000
	Coordination with Agency Participants		1 fte		80	80	75	6,000			6,000
	Cost and Schedule Control		1 fte		59	59	65	3,848			3,848
	Ensure Compliance of Gov't Regulation		1 fte		32	32	70	2,240			2,240
	Reviews		1 fte		32	32	65	2,080			2,080
	Audit Preparation and Coordination		1 fte		32	32	65	2,080			2,080
	Annual Operations and Maintenance Reports		1 fte		40	40	65	2,600			2,600
	Total Cost (Per Year)										33,850
	Program Management Costs - 100 Year Duration		100 yrs	33,850					3,385,000		3,385,000
WAG-Wide RA 5 Yr. Review - (Cost Per Each, Required (1) FTE For Years 2 thru 5; (1) FTE in (5) Yr. Increments for 6 thru 95)											
	RA Report Preparation		23 yrs		1,440	33,120	75	2,484,000			2,484,000
	Reviews and Comment Resolution		23 yrs		440	10,120	75	759,000			759,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										3,243,000
Remedial Design											
Added Institutional Controls - 5 Yr. Review of Deed Restrictions with Governing Bodies and Public Comment Over a 100 Year Period; Total of 20 Reviews.											
	Legal Attorney and Env. Affairs at \$32K ea.		20 ea	32,000					640,000		640,000
	Total Added Institutional Controls - 100 Year Duration										640,000
Caretaker/Maintenance											
	Caretaker		0.1 fte		1,880	188	75	14,100			14,100
	Fencing Maintenance (Maintaining Existing Fencing is Not Included)										N/A
	Area/Access Materials and Repair		12 mos.	500					6,000		6,000
	Caretaker/Maintenance Cost Per Year										20,100
	Caretaker Cost - 100 Year Duration		100 yrs	20,100					2,010,000		2,010,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 2 - LIMITED ACTION
EXIST/ADDED INST. CONTROLS & MONITORING

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT-LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	FFA/CO Management and Oversight										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		640	640	75	48,000			48,000
	Coordination with Agency Participants		1 fte		320	320	75	24,000			24,000
	Cost and Schedule Control		1 fte		320	320	65	20,800			20,800
	Ensure Compliance of Gov't Regulation		1 fte		160	160	70	11,200			11,200
	Quarterly and Yearly Reviews		1 fte		160	160	65	10,400			10,400
	Audit Preparation and Coordination		1 fte		160	160	65	10,400			10,400
	Total Cost (Per Year)										124,800
	Total Cost (Per Year Rounded)										125,000
	Program Management - 1 Year Duration		1 yr	125,000					125,000		125,000
	RA Document Preparation										
	RD/RA SOW										
	PreDesign Studies/Preliminary Scoping		3 fte		90	240	75	18,000			18,000
	Design Criteria		1 fte		40	40	75	3,000			3,000
	RD/RA Document Preparation		1 fte		80	80	75	6,000			6,000
	Reviews and Comment Resolution		1 fte		360	360	75	27,000			27,000
	RD/RA SOW Cost										54,000
	RA Workplan										
	Preliminary Scoping		1 fte		160	160	75	12,000			12,000
	RD/RA Document Preparation		1 fte		260	260	75	19,500			19,500
	Reviews and Comment Resolution		1 fte		420	420	75	31,500			31,500
	RA Workplan Cost										63,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 2 - LIMITED ACTION
EXIST/ADDED INST. CONTROLS & MONITORING

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RA Document Preparation (cont.)										
	Packaging, Shipping, Transportation Documentation										
	Sampling and Analysis		N/A								N/A
	Hazard Classification		N/A								N/A
	Selection and Procurement of Packaging		N/A								N/A
	Packaging, Shipping, Transportation Documentation Cost										N/A
	Remedial Action Report										
	RA Report Preparation		1 fte		320	320	75	24,000			24,000
	Reviews and Comment Resolution		1 fte		320	320	75	24,000			24,000
	Remedial Action Report Cost										48,000
	WAG-Wide RA 5 Yr. Review - (Cost Includes (1) FTE For (1) yr for the Initial Review										
	RA Report Preparation		1 yr		1,440	1,440	75	108,000			108,000
	Reviews and Comment Resolution		1 yr		440	440	75	33,000			33,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										141,000
	RD Document Preparation										
	Safety Analysis Documentation (ASA & HSP)										
	Auditable Safety Analysis/Hazards Classification		2 fte		160	320	75	24,000			24,000
	Unresolved Safety Questions		2 fte		160	320	75	24,000			24,000
	Quality Assurance		1 fte		30	30	75	2,250			2,250
	Review & Comment Resolution		2 fte		335	670	75	50,250			50,250
	Safety Analysis Documentation Cost										100,500
	Sampling and Analysis Plan										
	Preliminary Scoping		1 fte		320	320	75	24,000			24,000
	Field Sampling Plan Preparation		1 fte		400	400	75	30,000			30,000
	Reviews and Comment Resolution		1 fte		720	720	75	54,000			54,000
	Sampling and Analysis Plan Cost										108,000

DETAILED COST ESTIMATE (CONT.SHEET)

Page 9 of 49

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 2 - LIMITED ACTION
EXIST/ADDED INST. CONTROLS & MONITORING

Type of Est. Planning File No. 4951-4 Date 01/05/99

ACCT. NO.	DESCRIPTION	E, V, P, H	MAT'L UNIT	MAT'L UT. COST	UNIT-LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RD Document Preparation (cont.)										
	Pre-Final Inspection Report										
	Checklist Preparation		1 fte		40	40	75	3,000			3,000
	Reviews and Comment Resolution		1 fte		60	60	75	4,500			4,500
	Pre-Final Inspection Report Cost										7,500
	Remedial Design										
	Initial Review of Deed Restrictions with Governing Bodies and Public Comment										
	Legal Attorney and Env. Affairs at \$32K ea.		1 ea	32,000					32,000		32,000
	Deed Restrictions Cost										32,000
	Title Design Construction Document Package										
	Remedial Design Workplan		1 fte		80	80	75	6,000			6,000
	Siting and Surveying		3 fte		40	120	40	4,800			4,800
	Procurement Document Package		12 dwgs	3,500					42,000		42,000
	Total Cost Title Design Construction Document Package										52,800
	Site Characterization - Including: Sample Collection Materials/Labor, Shipping, SMO TOS Preparation & Analysis Reporting, ERIS Quality Reporting										
	Assume a Total Allowance of 100 Samples for all Sites		100 smpls	1,000	4	400	75	30,000	100,000	500	130,500
										(Materials)	
	Construction Subcontract										
	6' h Security Fence w/Gates, Signage and Markers		11,000 lf	25	Included				275,000		275,000
	Surface Water Diversion Provision		11,000 lf	5	Included				55,000		55,000
	Subtotal Subcontractor Directs										330,000
	Subcontractor Overhead and Profit @ 30%										99,000
	Total Subcontractor Directs and Indirects										429,000
	Procurement and G&A Fees										81,510
	Total Subcontractor Cost										510,510
	Project/Construction Management for Subcontract										128,700

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES File No. 4951-4 Date 01/05/99

Type of Est. Planning

SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25

ALTERNATIVE 2 - LIMITED ACTION
EXIST/ADDED INST. CONTROLS & MONITORING

ACCT. NO.	DESCRIPTION	E.V. P.H.	MAT'L UNIT	MAT'L COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	Remedial Action - Operations (100 Year Duration)										
	Program Management		1 fte		200	200	75	15,000			15,000
	Coordination/Oversight of Technical Support		1 fte		80	80	75	6,000			6,000
	Coordination with Agency Participants		1 fte		59	59	65	3,848			3,848
	Cost and Schedule Control		1 fte		32	32	70	2,240			2,240
	Ensure Compliance of Gov't Regulation		1 fte		32	32	65	2,080			2,080
	Reviews		1 fte		32	32	65	2,080			2,080
	Audit Preparation and Coordination		1 fte		32	32	65	2,080			2,080
	Annual Operations and Maintenance Reports		1 fte		40	40	65	2,600			2,600
	Total Cost (Per Year)			33,850					3,385,000		3,385,000
	Program Management Costs - 100 Year Duration										
	WAG-Wide RA 5 Yr. Review - (Cost Per Each, Required (1) FTE For Years 2 thru 5; (1) FTE In (5) Yr. Increments for 6 thru 95)										
	RA Report Preparation		23 yrs		1,440	33,120	75	2,484,000			2,484,000
	Reviews and Comment Resolution		23 yrs		440	10,120	75	759,000			759,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										3,243,000
	Remedial Design										
	Added Institutional Controls - 5 Yr. Review of Deed Restrictions with Governing Bodies and Public Comment Over a 100 Year Period; Total of 20 Reviews.			32,000					640,000		640,000
	Legal Attorney and Env. Affairs at \$32K ea.		20 ea								
	Total Added Institutional Controls - 100 Year Duration										
	Caretaker/Maintenance										
	Caretaker		0.1 fte		1,880	188	75	14,100			14,100
	Fencing Maintenance		10,980 lf	0.5					5,490		5,490
	Area/Access Materials and Repair		12 mos.	500					6,000		6,000
	Caretaker/Maintenance Cost Per Year										25,590
	Caretaker Cost - 100 Year Duration								2,559,000		2,559,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3A - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING NATIVE SOIL CAP

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	FFA/CO Management and Oversight										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		640	640	75	48,000			48,000
	Coordination with Agency Participants		1 fte		320	320	75	24,000			24,000
	Cost and Schedule Control		1 fte		320	320	65	20,800			20,800
	Ensure Compliance of Gov't Regulation		1 fte		160	160	70	11,200			11,200
	Quarterly and Yearly Reviews		1 fte		160	160	65	10,400			10,400
	Audit Preparation and Coordination		1 fte		160	160	65	10,400			10,400
	Total Cost (Per Year)										124,800
	Total Cost (Per Year Rounded)										125,000
	Program Management - 3 Year Duration		3 yr	125,000					375,000		375,000
	RA Document Preparation										
	RD/RA SOW										
	PreDesign Studies/Preliminary Scoping		3 fte		80	240	75	18,000			18,000
	Design Criteria		1 fte		40	40	75	3,000			3,000
	RD/RA Document Preparation		1 fte		80	80	75	6,000			6,000
	Reviews and Comment Resolution		1 fte		360	360	75	27,000			27,000
	RD/RA SOW Cost										54,000
	RA Workplan										
	Preliminary Scoping		1 fte		160	160	75	12,000			12,000
	RD/RA Document Preparation		1 fte		260	260	75	19,500			19,500
	Reviews and Comment Resolution		1 fte		420	420	75	31,500			31,500
	RA Workplan Cost										63,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3A - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING NATIVE SOIL CAP

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RA Document Preparation (cont)										
	Packaging, Shipping, Transportation Documentation										
	Sampling and Analysis		1 fte		240	240	75	18,000			18,000
	Hazard Classification		1 fte		200	200	75	15,000			15,000
	Selection & Procurement of Packaging		1 fte		200	200	75	15,000			15,000
	Packaging, Shipping, Transportation Documentation Cost										48,000
	Remedial Action Report										
	RA Report Preparation		1 fte		320	320	75	24,000			24,000
	Reviews and Comment Resolution		1 fte		320	320	75	24,000			24,000
	RA Report Cost										48,000
	WAG-Wide RA 5 Yr. Review - (Cost Includes (1) FTE For (1) yr for the Initial Review										
	RA Report Preparation		1 yr		1,440	1,440	75	108,000			108,000
	Reviews and Comment Resolution		1 yr		440	440	75	33,000			33,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										141,000
	RD Document Preparation										
	Safety Analysis Documentation (ASA & HSP)										
	Auditable Safety Analysis/Hazs. Classification		2 fte		160	320	75	24,000			24,000
	Unresolved Safety Questions		2 fte		160	320	75	24,000			24,000
	Quality Assurance		1 fte		30	30	75	2,250			2,250
	Review and Comments Resolution		2 fte		335	670	75	50,250			50,250
	Safety Analysis Documentation Cost										100,500
	Sampling and Analysis Plan										
	Preliminary Scoping		1 fte		320	320	75	24,000			24,000
	Field Sampling Plan Preparation		1 fte		400	400	75	30,000			30,000
	Reviews and Comment Resolution		1 fte		720	720	75	54,000			54,000
	Sampling and Analysis Plan Cost										108,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3A - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING NATIVE SOIL CAP

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RD Document Preparation (continued)										
	Pre-Final Inspection Report										
	Checklist Preparation		1 fte		40	40	75	3,000			3,000
	Reviews and Comment Resolution		1 fte		60	60	75	4,500			4,500
	Pre-Final Inspection Report Cost										7,500
	Remedial Design										
	Initial Review of Deed Restrictions with Governing Bodies and Public Comment										
	Legal Attorney and Env. Affairs at \$32K ea.		1 ea	32,000					32,000		32,000
	Deed Restrictions Cost										32,000
	Title Design Construction Document Package - For Construction Subcontract										
	Remedial Design Workplan		1 fte		320	320	75	24,000			24,000
	Siting and Surveying		1 site		80	80	40	3,200			3,200
	Procurement Document Package		50 dwgs	3,500					175,000		175,000
	Total Title Design Package										202,200
	Site Characterization - Including: Sample Collection Materials/Labor, Shipping, SMO TOS Preparation & Analysis Reporting, ERIS Quality Reporting										
	Assume a Total Allowance of 100 Samples for all Sites		100 smpls	1,000	4	400	75	30,000	100,000	500	130,500
										(Materials)	

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3A - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING NATIVE SOIL CAP

Type of Est. Planning File No. 4951-4 Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
Remedial Action - Construction Subcontract - Excavate Soils - Consolidate - Native Cap											
(Assume Existing Facilities, Fencing, and Utilities have been Demo'd by D&D Program Prior to Excavation)											
	Mobilization of Equipment and Crew Onsite		1 ls		24	24	350	8,400			8,400
	Excavate and Consolidate over ARA I and ARA II		41,750 cy		0.1	4,175	350	1,461,250			1,461,250
	Manual Separation of Vegetation		8,350 cy		0.12	1,002	32	32,064		Equip. Rental	32,064
	Size Vegetation (Assume Open Air Chipper)		8,350 cy		0.25	2,088	32	66,800		20,000	86,800
	Box and Ship to WERF(Assume 90% Reduction)		835 cy	30	0.20	167	150	25,050	25,050		50,100
	Shape and Contour Excavated Areas		46 Acres	1,500					69,000		69,000
	Revegetate Excavated Areas		46 Acres	2,000					92,000		92,000
	Cap with Native Soil (1000' x 500)										
	Prep Site for Soils		14 acres	1,500	Included				21,000		21,000
	Mine Low Perm Soil		160,500 cy	3	Included				481,500		481,500
	Import Low Perm. Soil		160,500 cy	7	Included				1,123,500		1,123,500
	Place and Compact Soil		160,500 cy	4	Included				642,000		642,000
	Vegetate Cover		14 acres	2000	Included				28,000		28,000
	Surveying: Grades, Lines, and Levels		3 fte		40	120	40	4,800			4,800
	Reclamation & Seeding of Borrow Areas		1 ls	20,000					20,000		20,000
	Access Restriction Fence										
	6' Security Fence		4,000 lf	25					100,000		100,000
	Surface Water Drainage		4,000 lf	5					20,000		20,000
	Decon & Demobilization of Equipment and Crew		1 ls		40	40	350	14,000			14,000
	Subtotal Subcontractor Directs										4,254,414
	Subcontractor Overhead and Profit @ 30%										1,276,324
	Total Subcontractor Directs and Indirects										5,530,738
	Procurement and G&A Fees										1,050,840
	Total Subcontractor Cost										6,581,578
	Project/Construction Management for Subcontract										829,611

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-6 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3A - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING NATIVE SOIL CAP

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT-LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	Remedial Action - Operations (100 Year Duration)										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		200	200	75	15,000			15,000
	Coordination with Agency Participants		1 fte		80	80	75	6,000			6,000
	Cost and Schedule Control		1 fte		59	59	65	3,848			3,848
	Ensure Compliance of Gov't Regulation		1 fte		32	32	70	2,240			2,240
	Reviews		1 fte		32	32	65	2,080			2,080
	Audit Preparation and Coordination		1 fte		32	32	65	2,080			2,080
	Annual Operations & Maintenance Reports		1 fte		40	40	65	2,600			2,600
	Total Cost (Per Year)										33,850
	Program Management Costs - 100 Year Duration		100 yrs	33,850					3,385,000		3,385,000
	WAG-Wide RA 5 Yr. Review - (Cost Per Each, Required (1) FTE For Years 2 thru 5; (1) FTE in (5) Yr. Increments for 6 thru 95)										
	RA Report Preparation		23 yrs		1,440	33,120	75	2,484,000			2,484,000
	Reviews and Comment Resolution		23 yrs		440	10,120	75	759,000			759,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										3,243,000
	Remedial Design										
	Added Institutional Controls - 5 Yr. Review of Deed Restrictions with Governing Bodies and Public Comment Over a 100 Year Period; Total of 20 Reviews.										
	Legal Attorney and Env. Affairs at \$32K ea.		20 ea	32,000					640,000		640,000
	Total Added Institutional Controls - 100 Year Duration										640,000
	Construction Caretaker/Maintenance										
	Caretaker		0.1 fte		1,880	188	75	14,100			14,100
	Fencing Maintenance		3,500 lf	0.5					1,750		1,750
	Cap Maintenance		600,000 sf	0.04					24,000		24,000
	Maintenance of Water Diversion		12 mths	500					6,000		6,000
	Construction Caretaker/Maintenance Cost Per Year										45,850
	Caretaker Cost - 100 Year Duration		100 yrs	45,850					4,585,000		4,585,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3B - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING ENGINEERED BARRIER

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT-LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	FFA/CO Management and Oversight										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		640	640	75	48,000			48,000
	Coordination with Agency Participants		1 fte		320	320	75	24,000			24,000
	Cost and Schedule Control		1 fte		320	320	65	20,800			20,800
	Ensure Compliance of Gov't Regulation		1 fte		160	160	70	11,200			11,200
	Quarterly and Yearly Reviews		1 fte		160	160	65	10,400			10,400
	Audit Preparation and Coordination		1 fte		160	160	65	10,400			10,400
	Total Cost (Per Year)										124,800
	Total Cost (Per Year Rounded)										125,000
	Program Management - 3 Year Duration		3 yr	125,000					375,000		375,000
	RA Document Preparation										
	RD/RA SOW										
	PreDesign Studies/Preliminary Scoping		3 fte		80	240	75	18,000			18,000
	Design Criteria		1 fte		40	40	75	3,000			3,000
	RD/RA Document Preparation		1 fte		80	80	75	6,000			6,000
	Reviews and Comment Resolution		1 fte		360	360	75	27,000			27,000
	RD/RA SOW Cost										54,000
	RA Workplan										
	Preliminary Scoping		1 fte		160	160	75	12,000			12,000
	RD/RA Document Preparation		1 fte		260	260	75	19,500			19,500
	Reviews and Comment Resolution		1 fte		420	420	75	31,500			31,500
	RA Workplan Cost										63,000

DETAILED COST ESTIMATE (CONT. SHEET)

Project WAG-5 FS COST ESTIMATES

SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25

ALTERNATIVE 3B - EXCAVATION, CONSOLIDATION, AND

CONTAINMENT USING ENGINEERED BARRIER

Type of Est. Planning

File No. 4951-4

Date

01/05/99

ACCT. NO.	DESCRIPTION	E.V. P.H.	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RA Document Preparation (cont)										
	Packaging, Shipping, Transportation Documentation										
	Sampling and Analysis		1 fte		240	240	75	18,000			18,000
	Hazard Classification		1 fte		200	200	75	15,000			15,000
	Selection and Procurement of Packaging		1 fte		200	200	75	15,000			15,000
	Packaging, Shipping, Transportation Documentation Cost										48,000
	Remedial Action Report										
	RA Report Preparation		1 fte		320	320	75	24,000			24,000
	Reviews and Comment Resolution		1 fte		320	320	75	24,000			24,000
	RA Report Cost										48,000
	WAG-Wide RA 5 Yr. Review - (Cost Includes (1) FTE For (1) yr for the Initial Review										
	RA Report Preparation		1 yr		1,440	1,440	75	108,000			108,000
	Reviews and Comment Resolution		1 yr		440	440	75	33,000			33,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										141,000
	RD Document Preparation										
	Safety Analysis Documentation (ASA & HSP)										
	Auditable Safety Analysis/Hazards Classification		2 fte		160	320	75	24,000			24,000
	Unresolved Safety Questions		2 fte		160	320	75	24,000			24,000
	Quality Assurance		1 fte		30	30	75	2,250			2,250
	Reviews and Comment Resolution		2 fte		335	670	75	50,250			50,250
	Safety Analysis Documentation Cost										100,500
	Sampling and Analysis Plan										
	Preliminary Scoping		1 fte		320	320	75	24,000			24,000
	Field Sampling Plan Preparation		1 fte		400	400	75	30,000			30,000
	Reviews and Comment Resolution		1 fte		720	720	75	54,000			54,000
	Sampling and Analysis Plan Cost										108,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3B - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING ENGINEERED BARRIER

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	RD Document Preparation (continued)										
	Pre-Final Inspection Report										
	Checklist Preparation		1 fte		40	40	75	3,000			3,000
	Reviews and Comment Resolution		1 fte		60	60	75	4,500			4,500
	Pre-Final Inspection Report Cost										7,500
	Remedial Design										
	Initial Review of Deed Restrictions with Governing Bodies and Public Comment										
	Legal Attorney and Env. Affairs at \$32K ea.		1 ea	32,000					32,000		32,000
	Deed Restrictions Cost										32,000
	Title Design Construction Document Package - For Construction Subcontract										
	Remedial Design Workplan		1 fte		320	320	75	24,000			24,000
	Siting and Surveying		1 site		80	80	40	3,200			3,200
	Procurement Document Package		60 dwgs	3,500					210,000		210,000
	Total Title Design Package										237,200
	Site Characterization - Including: Sample Collection Materials/Labor, Shipping, SMO TOS Preparation & Analysis Reporting, ERIS Quality Reporting										
	Assume a Total Allowance of 100 Samples for all Sites		100 smpls	1,000	4	400	75	30,000	100,000	500	130,500
										(Materials)	

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3B - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING ENGINEERED BARRIER

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
Remedial Action - Construction Subcontract - Cap with Engineered Barrier											
(Assume no Decon and Removal of Soils Only - Including: Roadways, Fencing, Rock - SL-1 Burial Ground)											
(Assume no Gravel Depth than 6")											
	Mobilization of Equipment and Crew Onsite		1 ls		24	24	350	8,400			8,400
	Excavate and Consolidate over ARA I and ARA II		41,750 cy		0.1	4,175	350	1,461,250			1,461,250
	Manual Separation of Vegetation		8,350 cy		0.12	1,002	32	32,064		Equip. Rental	32,064
	Size Vegetation (Assume Open Air Chipper)		8,350 cy		0.25	2,088	32	66,800		20,000	86,800
	Box and Ship to WERF(Assume 90% Reduction)		835 cy	30	0.20	167	150	25,050	25,050		50,100
	Shape and Contour Excavated Areas		46 Acres	1,500					69,000		69,000
	Revegetate Excavated Areas		46 Acres	2,000					92,000		92,000
	Engineered Cap										
	Prep Site For Soils		14 acres	1,500	Included				21,000		21,000
	8" Gravel		14,500 cy	25	Included				362,500		362,500
	12" Cobble		22,000 cy	17	Included				374,000		374,000
	8" Gravel		15,000 cy	25	Included				375,000		375,000
	24" Rip Rap		46,000 cy	17	Included				782,000		782,000
	Surveying: Grades, Lines & Levels		3 fte		80	240	40	9,600			9,600
	Reclamation Seeding of Borrow Areas		1 ls	20,000					20,000		20,000
	Access Restriction Fence										
	6' Security Fence - 1 Gate		3,500 lf	25					87,500		87,500
	Surface Water Drainage		3,500 lf	5					17,500		17,500
	Decon & Demobilization of Equipment and Crew		1 crew		40	40	350	14,000			14,000
	Subtotal Subcontractor Directs										3,862,714
	Subcontractor Overhead and Profit @ 30%										1,158,814
	Total Subcontractor Directs and Indirects										5,021,528
	Procurement and G&A Fees										954,090
	Total Subcontractor Cost										5,975,619
	Project/Construction Management for Subcontract										753,229

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3B - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING ENGINEERED BARRIER

Type of Est. Planning

File No. 4951-4

Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	Remedial Action - Operations (100 Year Duration)										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		200	200	75	15,000			15,000
	Coordination with Agency Participants		1 fte		80	80	75	6,000			6,000
	Cost and Schedule Control		1 fte		59	59	65	3,848			3,848
	Ensure Compliance of Gov't Regulation		1 fte		32	32	70	2,240			2,240
	Reviews		1 fte		32	32	65	2,080			2,080
	Audit Preparation and Coordination		1 fte		32	32	65	2,080			2,080
	Annual Operations & Maintenance Reports		1 fte		40	40	65	2,600			2,600
	Total Cost (Per Year)										33,850
	Program Management Costs - 100 Year Duration		100 yrs	33,850					3,385,000		3,385,000
	WAG-Wide RA 5 Yr. Review - (Cost Per Each, Required (1) FTE For Years 2 thru 5; (1) FTE in (5) Yr. Increments for 6 thru 95)										
	RA Report Preparation		23 yrs		1,440	33,120	75	2,484,000			2,484,000
	Reviews and Comment Resolution		23 yrs		440	10,120	75	759,000			759,000
	WAG-Wide RA 5 Yr. Reviews For 100 Years										3,243,000
	Remedial Design										
	Added Institutional Controls - 5 Yr. Review of Deed Restrictions with Governing Bodies and Public Comment Over a 100 Year Period; Total of 20 Reviews.										
	Legal Attorney and Env. Affairs at \$32K ea.		20 ea	32,000					640,000		640,000
	Total Added Institutional Controls - 100 Year Duration										640,000
	Construction Caretaker/Maintenance										
	Caretaker		0.1 fte		1,880	188	75	14,100			14,100
	Fencing Maintenance		3,500 lf	0.5					1,750		1,750
	Cap Maintenance		600,000 sf	0.04					24,000		24,000
	Maintenance of Water Diversion		12 mths	500					6,000		6,000
	Construction Caretaker/Maintenance Cost Per Year										45,850
	Caretaker Cost - 100 Year Duration		100 yrs	45,850					4,585,000		4,585,000

DETAILED COST ESTIMATE (CONT.SHEET)

Page 23 of 49

Project WAG-6 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 3B - EXCAVATION, CONSOLIDATION, AND
CONTAINMENT USING ENGINEERED BARRIER

Type of Est. Planning File No. 4951-4 Date 01/05/99

ACCT. NO.	DESCRIPTION	E,V, P,H	MAT'L UNIT	MAT'L UT. COST	UNIF LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	Operations, Maintenance, Materials & Disposal		N/A								N/A
	D&D of Facilities		N/A								N/A
	Surveillance and Monitoring (annual sampling & monitoring activities) - Assumes all groundwater monitoring is conducted by Others										
	Air Sampling/Monitoring, Maint. Insp./Report		100 yrs	NOT INCLUDED							NOT INCLUDED
	Yearly Soil Sampling/Characterization (30 Samples)		100 yrs	39,150					3,915,000		3,915,000
	5-Year Review Report		20 times	6,000					120,000		120,000
	Surveillance and Monitoring Costs - 100 Year Duration										
											4,035,000

DETAILED COST ESTIMATE (CONT.SHEET)

Project WAG-5 FS COST ESTIMATES
SOIL SITES: ARA-01, ARA-12, ARA-16, ARA-23, PBF-16, ARA-25
ALTERNATIVE 4A - REMOVAL AND DISPOSAL
AT INEEL

Type of Est. Planning File No. 4951-4 Date 01/05/99

ACCT. NO.	DESCRIPTION	E.V. P,H	MAT'L UNIT	MAT'L UT. COST	UNIT LAB. HRS	TOTAL LAB. HRS.	LABOR RATE	LABOR COST	MAT'L COST	OTHER COST	TOTAL COST
	FFA/CO Management and Oversight										
	Program Management										
	Coordination/Oversight of Technical Support		1 fte		640	640	75	48,000			48,000
	Coordination with Agency Participants		1 fte		320	320	75	24,000			24,000
	Cost and Schedule Control		1 fte		320	320	65	20,800			20,800
	Ensure Compliance of Gov't Regulation		1 fte		160	160	70	11,200			11,200
	Quarterly and Yearly Reviews		1 fte		160	160	65	10,400			10,400
	Audit Preparation and Coordination		1 fte		160	160	65	10,400			10,400
	Total Cost (Per Year)										124,800
	Total Cost (Per Year Rounded)										125,000
	Program Management - 3 Year Duration		3 yr	125,000					375,000		375,000
	RA Document Preparation										
	RD/RA SOW										
	PreDesign Studies/Preliminary Scoping		3 fte		80	240	75	18,000			18,000
	Design Criteria		1 fte		40	40	75	3,000			3,000
	RD/RA Document Preparation		1 fte		80	80	75	6,000			6,000
	Reviews and Comment Resolution		1 fte		360	360	75	27,000			27,000
	RD/RA SOW Cost										54,000
	RA Workplan										
	Preliminary Scoping		1 fte		160	160	75	12,000			12,000
	RD/RA Document Preparation		1 fte		260	260	75	19,500			19,500
	Reviews and Comment Resolution		1 fte		420	420	75	31,500			31,500
	RA Workplan Cost										63,000