

Appendix F. Estimated Cost Summary Tables for Remedial Alternatives
 Remedial Action Plan
 Schlage OU and San Francisco County Portion of UPC OU

REMEDIAL ALTERNATIVE	*CAPITAL COSTS	*ANNUAL COSTS	*TOTAL COSTS
<u>ALTERNATIVE 1</u> No Action	No Costs	No Costs	No Costs
<u>ALTERNATIVE 2</u> Land Use Controls and Monitored Natural Attenuation	No Costs	\$ 1,590,000	\$ 1,590,000
<u>ALTERNATIVE 3</u> Excavation, Onsite Treatment, Relocation and Capping for Soils, In Situ Groundwater Treatment	\$ 4,452,000	\$ 986,000	\$ 5,438,000
<u>ALTERNATIVE 4</u> Excavation and Offsite Disposal for Soils, In Situ Groundwater Treatment	\$ 9,317,000	\$ 986,000	\$ 10,302,000

**The following costs are assumed to be addressed under separate programs: (1) Long Term Management of Deed/Access Restrictions, and Land Use Controls; (2) Administrative Record Management (after submission of documents); (3) Community Relations.*

Checked____KC____

Approved____MLS____

Cost Estimate -- Remedial Alternative 2
 Land Use Controls and Monitored Natural Attenuation

TASK	COST ESTIMATE	
GROUNDWATER MONITORING		
Quarterly Monitoring & Reporting -- 10 Years	\$	720,000
Semi-Annual Monitoring & Reporting -- 10 Years	\$	360,000
Annual Monitoring & Reporting -- 10 Years	\$	210,000
Closure Reporting	\$	35,000
	\$	1,325,000
Land Use Controls, 5-Year Reviews, Project Management & Contingency (20%)	\$	265,000
TOTAL	\$	1,590,000

ASSUMPTIONS: These cost estimates are for comparison purposes only, and have an accuracy of +50/-30%. Cost estimates will be refined after the remedial design is completed. Costs to implement, monitor, and maintain land use controls will be covered under existing property management programs.

Checked _____ KC _____

Approved _____ MLS _____

Cost Estimate -- Remedial Alternative 3
 Excavation, Onsite Treatment, Relocation and Capping for Soils
 In Situ Groundwater Treatment and Monitoring

TASK	COST ESTIMATE
SOIL EXCAVATION AND TREATMENT	
Remedial Design	\$ 62,000
Site Management and Facilities	\$ 170,000
Excavate CVOC Soils, Sampling, Grading	\$ 172,000
Onsite Treatment CVOC Soils, Backfill	\$ 178,000
Offsite Disposal CVOC Source Materials	\$ 225,000
Excavate Metals Soils, Sampling, Onsite Relocation, Capping	\$ 236,000
Construction Completion Report	\$ 45,000
	\$ 1,088,000
IN SITU GROUNDWATER TREATMENT	
ERD Injection (Event 1 & 2)	\$ 1,573,000
ERD Injection (Event 3 & 4)	\$ 975,000
Reporting	\$ 74,000
	\$ 2,622,000
GROUNDWATER MONITORING	
Monitoring: Quarterly (2 Yrs), Semi-Annual (4 Yrs); Annual (24 Yrs)	\$ 499,000
Reporting: Quarterly (2 Yrs), Semi-Annual (4 Yrs); Annual (24 Yrs)	\$ 287,000
Closure Reporting	\$ 35,000
	\$ 821,000
SUBTOTAL	\$ 4,531,000
Land Use Controls, 5-Year Reviews, Project Management & Contingency (20%)	\$ 907,000
TOTAL ESTIMATED COST	\$ 5,438,000

ASSUMPTIONS: These cost estimates are for comparison purposes only, and have an accuracy of +50/-30%. Cost estimates will be refined after the remedial design is completed. Costs for implementation of alternatives do not include further data gap investigations, pilot studies, or remedial design assumed to be covered under other programs.

Checked _____ KC _____

Approved _____ MLS _____

Cost Estimate -- Remedial Alternative 4
 Excavation and Offsite Disposal for Soils
 In Situ Groundwater Treatment and Monitoring

TASK	COST ESTIMATE
SOIL EXCAVATION AND TREATMENT	
Remedial Design	\$ 62,000
Site Management and Facilities	\$ 170,000
Excavate CVOC Soils, Sampling, Grading, Backfill	\$ 235,000
Offsite Disposal CVOC Soils	\$ 907,000
Excavate Metals Soils, Sampling, Grading, Backfill	\$ 236,000
Offsite Disposal Metals Soils	\$ 3,487,000
Construction Completion Report	\$ 45,000
	\$ 5,142,000
IN SITU GROUNDWATER TREATMENT	
ERD Injection (Event 1 & 2)	\$ 1,573,000
ERD Injection (Event 3 & 4)	\$ 975,000
Reporting	\$ 74,000
	\$ 2,622,000
GROUNDWATER MONITORING	
Monitoring: Quarterly (2 Yrs), Semi-Annual (4 Yrs); Annual (24 Yrs)	\$ 499,000
Reporting: Quarterly (2 Yrs), Semi-Annual (4 Yrs); Annual (24 Yrs)	\$ 287,000
Closure Reporting	\$ 35,000
	\$ 821,000
	SUBTOTAL \$ 8,585,000
Land Use Controls, 5-Year Reviews, Project Management & Contingency (20%)	\$ 1,717,000
	TOTAL ESTIMATED COST \$ 10,302,000

ASSUMPTIONS: These cost estimates are for comparison purposes only, and have an accuracy of +50/-30%. Cost estimates will be refined after the remedial design is completed. Costs for implementation of alternatives do not include further data gap investigations, pilot studies, or remedial design assumed to be covered under other programs.

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Approved _____ MLS _____