

Table 3.3
Construction Cost Estimate
Preliminary Evaluation of Alternatives
Alternative 5 - Excavation and Off-Site Disposal

Capital Costs

Code	Description	Unit	Quantity	Unit Cost	Total Cost
I	MOBILIZATION/DEMOBILIZATION				
a.	Excavation Equipment backhoe, bulldozer, vibratory roller, water truck	LS	1	\$5,000	\$5,000
b.	Misc. Construction Expenses coordination, travel, physical exams permits: air, discharge, and construction	LS	1	\$15,000	\$15,000
	Subtotal				\$20,000
II	SITE PREPARATION				
a.	Set-up of trailers, decon, etc.	LS	1	\$7,500	\$7,500
b.	Site Clearing brush, trees, and debris	LS	1	\$5,000	\$5,000
c.	Equipment rental, supplies, phone, and power	Month	6	\$1,500	\$9,000
d.	Health and safety equipment, disposals	Month	6	\$1,000	\$6,000
e.	Air Monitoring	Month	6	\$3,000	\$18,000
f.	Survey (Construction and Records)	Day	5	\$800	\$4,000
g.	Work Plan / Health and Safety Plan	LS	1	\$10,000	\$10,000
h.	Meetings	Each	5	\$1,000	\$5,000
	Subtotal				\$64,500
III	METAL CONTAMINATED SOIL EXCAVATION / DISPOSAL				
a.	Excavation & Loading of contaminated soils	CY	17,885	\$8	\$143,080
b.	UXO identification	each	1	\$30,000	\$30,000
c.	Off-site landfill as non-hazardous waste (1 CY = 1.5 tons) (\$51/ton to BFI Tesman Rd., 40 miles @0.15/ton-mile)	CY	17,885	\$86	\$1,538,110
d.	Backfill excavated areas with a clean fill	CY	13,414	\$15	\$201,206
e.	Backfill excavated areas with 6" of topsoil	CY	4,471	\$25	\$111,781
f.	Seed / fertilize topsoil	Acre	10	\$1,700	\$17,000
	Subtotal				\$2,041,178
IV	ANALYTICAL TESTING				
a.	TCLP metals on excavated soil	Each	34	\$600	\$20,400
b.	Confirmatory sampling for metals	Each	100	\$150	\$15,000
	Subtotal				\$35,400
V	CLOSURE				
a.	Documentation	Each	1	\$25,000	\$25,000
	Subtotal				\$25,000
	SUBTOTAL CAPITAL COSTS				\$2,180,078
	Engineering (for design and construction mgmt.)	10.0 %			\$218,608
	Contingency	20.0 %			\$437,216
	TOTAL CAPITAL COSTS (Pc)				\$2,800,000

Annual Operation and Maintenance Costs

$Po + m = 0$ (No O&M is necessary after remediation)

ALTERNATIVE 5 TOTAL PW COSTS ($Pt = Pc + 19.6 * Po + m$)
 (based on a 3% interest rate)

\$2,800,000