

Table A20-1b *Estimated Cost of Institutional Controls and Hot Spot Soil Excavation and Disposal
FS Group A20-1 - Remedial Alternative A20-1B (Commercial Use)
Sites 10D and 11D
Perimeter Groundwater Operable Unit RI/FS
Aerojet Superfund Site
Sacramento County, California*

DESCRIPTION	QUANTITY		ESTIMATED COST	
	NUMBER	UNIT	UNIT COST (\$)	TOTAL COST (\$)
DIRECT CAPITAL COST				
Reporting				
Remedial Design/Remedial Action(RD/RA) Workplan	1	LS	\$15,000	\$15,000
Remedial Action Summary (Construction Completion Report)	1	LS	\$15,000	\$15,000
		SUBTOTAL - REPORTING		\$30,000
Excavation and Disposal				
Surveying (pre- and post-excavation)	2	DAY	\$1,500	\$3,000
Equipment mobilization/demobilization	1	LS	\$6,000	\$6,000
Excavate and stockpile soil for Class II Landfill - Site 10D	135	TON	\$6	\$800
Soil transportation and disposal (Class II Landfill) - Site 10D	135	TON	\$40	\$5,400
Excavate and stockpile soil for Class I Landfill	0	TON	\$36	\$0
Soil transportation and disposal (Class I Landfill)	0	TON	\$91	\$0
Backfill excavations with clean fill and compact fill	0	TON	\$10	\$0
Water truck	3	DAY	\$500	\$1,500
Regulatory Oversight	1	LS	\$10,000	\$5,000
		SUBTOTAL - EXCAVATION AND DISPOSAL		\$21,700
Confirmation and Stockpile Sample Analyses				
Stockpile sampling - Title 22 metals (1 sample/100 CY)	2	EA	\$130	\$300
Excavation floor confirmatory sampling ²	6	EA	\$130	\$800
Excavation sidewall sampling ³	6	EA	\$130	\$800
		SUBTOTAL - SAMPLING		\$1,900
		SUBTOTAL - DIRECT CAPITAL COST		\$53,600
INDIRECT CAPITAL COST				
Engineering Design, Procurement, Administrative, and Legal Costs (% of Direct Capital Costs)	1	%	10	\$5,400
Construction Management (% of Direct Capital Costs)	1	%	10	\$5,400
Project Management (% of Direct Capital Costs)	1	%	6	\$3,200
Contractor's General Requirements (assume monthly rental of job trailer, storage box, and portable toilet; and administration support)	0.5	Week	\$1,000	\$500
		SUBTOTAL - INDIRECT CAPITAL COST		\$14,500
		SUBTOTAL - CAPITAL COST (DIRECT AND INDIRECT)		\$68,000
		General Contingency (20% of total direct and indirect)		\$14,000
		TOTAL ESTIMATED CAPITAL COST		\$82,000
INSTITUTIONAL CONTROLS COST (From Table Q-3d):				\$17,500
		TOTAL ESTIMATED COST FOR ICs AND EXCAVATION AND DISPOSAL		\$99,500

Notes and Key:

1 = Costs associated with the excavation and disposal of soil containing PCBs at Source Area 11D are included Volume III (Feasibility Study) of the Boundary Operable Unit RI/FS (ERM, November 2008).

2 = Excavation Floor Confirmation Samples assumes 1 sample per 1,000 square feet or 1 sample from excavation less than 1,000 square feet.

3 = Excavation Sidewall Samples - Assumes 1 sample every 25 liner foot or 1 sample from each sidewall for excavation.

% = Percent

EA = Each

LS = Lump Sum

Ton = 2,000 pounds