

Table 9.4

**Treatability Study Cost Analysis for SWMU B-28 - CSSA**  
Technology: Off-Site Disposal of Affected Soils

Cost Item	Type of Cost	Description	Unit	No. of Units	Unit Costs	Totals
I	<b>CAPITAL</b>					
		<b>Mobilization/Demobilization</b>				
		a. Mobilization of personnel and equipment <sup>f</sup>	each	1	\$140	\$140
		b. Demobilization of personnel and equipment <sup>f</sup>	each	1	\$140	\$140
		<b>Plan Preparation<sup>b</sup></b>				
		a. Health & safety/work plan	each	1	\$4,000	\$4,000
		b. Closure Plan	each	1	\$7,000	\$7,000
		<b>Total Capital Cost</b>				<b>\$11,280</b>
II	<b>OPERATIONS AND MAINTENANCE</b>					
		<b>Disposal of Affected Soils</b>				
		a) Excavate and load affected soil into dump trucks (assume 95%) for transport to a Class 1 NonHaz landfill	BCY	730		
		b) Transport and dispose affected soil <sup>c</sup> (assume 95%) at a Class 1 NonHaz landfill	BCY	694	\$15	\$10,410
		c) Excavate, stabilize, and load affected soil into dump trucks (assume 5%) for transport to a Class 2 Haz landfill	RT Loads	48	\$210	\$10,080
		d) Transport and dispose affected soil <sup>c</sup> (assume 5%) at a Class 2 Haz landfill	BCY	37	\$65	\$2,405
			RT Loads	3	\$210	\$630
		<b>Total Operations and Maintenance Cost</b>				<b>\$23,525</b>
III	<b>OTHER TECHNOLOGY-SPECIFIC COSTS</b>					
		<b>Waste Characterization</b>				
		a) TCLP (include Sb, As, Ba, Be, Cd, Cr, Pb, Hg, Ni, Se, Ag)	sample	1	\$150	\$150
		<b>Confirmation Sampling in Excavation<sup>d</sup></b>				
		a) Metals (include Ba, Cu, Zn as recommended)	sample	4	\$150	\$548
		<b>Validation</b>				
	a) Data Validation	sample	4	\$100	\$365	
		<b>Total Technology Cost</b>				<b>\$1,063</b>
		<b>SUBTOTAL</b>				<b>\$35,868</b>
IV	<b>OTHER PROJECT COSTS</b>					
		<b>Engineering<sup>b</sup></b> (for design and management)	10%			<b>\$3,587</b>
		<b>Contingency<sup>b</sup></b>	15%			<b>\$5,380</b>
<b>Calculated Remediation Cost<sup>a,b</sup></b>						<b>\$44,830</b>

Costs obtained from Eagle Construction and Environmental Services unless otherwise noted.

a Assume that the excavation equipment includes one dozer and one trackhoe.

b Estimate based on engineering experience

c Assume that 18 LCY can be transported per each RT and the one BCY is equivalent to 1.25 LCY.

d Assume 10 confirmation samples for every 2000 BCY removed from the site (includes one duplicate and one MS/MSD).

Based on guidance of one confirmation sample per 100 feet of sidewall.

BCY bench or in-place cubic yard

LCY Loose Cubic Yard

RT round trip