Table 9.5

**Treatability Study Cost Analysis for SWMU Demo Dud - CSSA**
Technology: Off-site Disposal of Affected Soils

| Cost Item | Type of Cost | Description | Unit | No. of Units | Unit Costs | Totals |
|---|---|---|---|---|---|---|
| I | **CAPITAL** | | | | | |
| | | **Mobilization/Demobilization** | | | | |
| | | a. Mobilization of personnel and equipment[a] | each | 1 | $140 | $140 |
| | | b. Demobilization of personnel and equipment[a] | each | 1 | $140 | $140 |
| | | **Plan Preparation[b]** | | | | |
| | | a. Health & safety/work plan | each | 1 | $4,000 | $4,000 |
| | | b. Closure Plan | each | 1 | $7,000 | $7,000 |
| | | **Total Capital Cost** | | | | **$11,280** |
| II | **OPERATIONS AND MAINTENANCE** | | | | | |
| | | **Disposal of Affected Soils** | BCY | 278 | | |
| | | a) Excavate and load affected soil into dump trucks (assume 95%) for transport to a Class 1 NonHaz landfill | BCY | 264 | $15 | $3,960 |
| | | b) Transport and dispose affected soil[c] (assume 95%) at a Class 1 NonHaz landfill | RT Loads | 18 | $210 | $3,780 |
| | | c) Excavate, stabilize, and load affected soil into dump trucks (assume 5%) for transport to a Class 2 Haz landfill | BCY | 14 | $65 | $910 |
| | | d) Transport and dispose affected soil[c] (assume 5%) at a Class 2 Haz landfill | RT Loads | 1 | $210 | $210 |
| | | **Total Operations and Maintenance Cost** | | | | **$8,860** |
| III | **OTHER TECHNOLOGY-SPECIFIC COSTS** | | | | | |
| | | **Waste Characterization** | | | | |
| | | a) TCLP (include Sb, As, Ba, Be, Cd, Cr, Pb, Hg, Ni, Se, Ag) | sample | 2 | $150 | $300 |
| | | b) TCLP VOCs | sample | 2 | $210 | $420 |
| | | c) TCLP SVOCs | sample | 2 | $265 | $530 |
| | | **Confirmation Sampling in Excavation** | | | | |
| | | a) Metals (include Cu, Pb, Hg, Zn as recommended) | sample | 12 | $150 | $1,800 |
| | | b) VOCs | sample | 12 | $200 | $2,400 |
| | | c) SVOCs | sample | 12 | $250 | $3,000 |
| | | **Validation** | | | | |
| | | a) Data Validation | sample | 12 | $100 | $1,200 |
| | | **Total Technology Cost** | | | | **$9,650** |
| | | **SUBTOTAL** | | | | **$29,790** |
| IV | **OTHER PROJECT COSTS** | | | | | |
| | | **Engineering[b]** (for design and management) | 10% | | | **$2,979** |
| | | **Contingency[b]** | 15% | | | **$4,469** |
| | | **Calculated Remediation Cost[b]** | | | | **$37,240** |

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.

BCY bench or in-place cubic yard

LCY Loose Cubic Yard

RT round trip