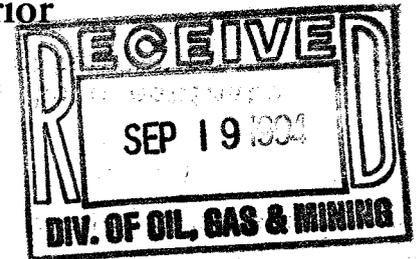




## United States Department of the Interior

OFFICE OF SURFACE MINING  
Reclamation and Enforcement  
1999 Broadway, Suite 3320  
Denver, Colorado 80202-5733



IN REPLY REFER TO:

September 14, 1994

TO: Randy Harden, Senior Reclamation Engineer  
Utah Division of Oil, Gas and Mining

From: Karen F. Jass, Mining Engineer  
Engineering Support Section

Through: Michael Rosenthal, Chief  
Physical Sciences Branch

Subject: Proposed Cost Estimate for Reclamation of Sunnyside  
Coal Company, Sunnyside, Utah.

The recommended OSM estimate for the reclamation of the Sunnyside Coal Company is \$8,600,000.

As discussed during phone conversations with you, this estimate does not include the cost for removal of highly contaminated (PCB) soils. This estimate does assume all replacement soil material is available within the permit boundaries, and that 50% of foundations, demolished material, and footers are hauled to an on-site disposal area. These three costs are reasonable assumptions for most demolition operations, and the costs reflect the minimization of moving the materials.

Using the DOGM estimate as a base, I added a figure of \$139,029 for demolition and disposal of facilities shown on the map, but not addressed in the SCC or DOGM cost estimates. In addition, my estimate for engineering, design, and administration costs was \$362,400, replacing the DOGM figure of \$320,111. Using the DOG procedure for calculation of future costs (2.01%) the total estimate was \$8,565,233, or rounded to \$8,600,000.

If I can be of further assistance or if I can answer any questions, please contact me at (303) 672-5561.

**DIRECT COSTS**

Demolition/Removal of Facilities

\$	2,058,476	(DOG)
\$	<u>139,029</u>	(additional costs from map)
\$	2,197,505	Total

Closure of Mine Openings

\$	103,250	(DOGM)
----	---------	--------

Backfilling and Grading (average 3 feet of material)

\$	3,517,470	(DOGM)
----	-----------	--------

Channel Reconstruction and Sediment Control

\$	580,500	(DOGM)
----	---------	--------

Revegetation (285 AC at \$500/AC)

\$	142,500	(DOGM)
----	---------	--------

TOTAL DIRECT COSTS           \$ 6,541,225

**INDIRECT COSTS**

Administrative/Design/Engineering

\$	362,400	
----	---------	--

Maintenance/Monitoring (3%)

\$	196,237	(DOGM)
----	---------	--------

Contingency (10%)

\$	654,123	(DOGM)
----	---------	--------

TOTAL INDIRECT COSTS       \$ 1,212,760

TOTAL DIRECT AND INDIRECT COSTS   \$ 7,753,985

Escalation @ 2.01 over 4 years       \$ 811,238

**Overall       Bond       Estimate                           \$ 8,565,223**

**Assumptions for Engineering/Design/Administration Cost Estimate**

1 Engineer X 40 hours/week X 24 weeks (6 months) X \$150/hour =  
\$ 144,000

**Surveying Crew - Initial**

3 person crew X 40 hours/week X 4 weeks X \$40/hour =  
\$ 19,200

**Site Visit by Engineer**

1 Engineer X 1 day/week X 4 weeks/month X 30 months X \$150/hour X  
10 hours/day =  
\$ 180,000

**Surveying Crew - Final**

3 person crew X 40 hours/week X 4 weeks X \$40/hour =  
\$ 19,200

**Total Assumed Cost \$ 362,400**