Mine File

7-7
#3

0012

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

September 23, 1994

Thomas E. Ehmett, Acting Director
Office of Surface Mining Reclamation
and Enforcement
Albuquerque Field Office
Suite 1200, 505 Marquette, N.W.
Albuquerque, New Mexico 87102

Re: Sunnyside Coal Company Bankruptcy
Case Number 94 12794 CEM

Dear Tom:

Enclosed is the original Amended Proof of Claim dated September 22, 1994, including Exhibit "A," regarding the referenced matter. Please sign this original and forward to DeAnne Owen for filing with the United States Bankruptcy Court, District of Colorado.

Very truly yours,

James W. Carter
Director

Enclosure
cc: T. A. Mitchell, Esq.

B10 (Official Form 10)
(Rev. 12/92)

United States Bankruptcy Court

_____ District of Colorado

Amended PROOF OF CLAIM

In re (Name of Debtor): In Re Sunnyside Coal Company

Case Number: 94 12794 CEM

NOTE: This form should not be used to make a claim for an administrative expense arising after the commencement of the case. A "request" for payment of an administrative expense may be filed pursuant to 11 U.S.C. § 503.

Name of Creditor
(The person or other entity to whom the debtor owes money or property)
State of Utah Div. of Oil, Gas & Mining
Office of Surface Mining

Name and Address Where Notices Should be Sent
Utah Attorney General
#3 Triad Suite 475
355 West North Temple
Salt Lake City, Utah 84180-1204
(See Exhibit "B" for OSM address)
Telephone No. (801) 538-5347

☐ Check box if you are aware that anyone else has filed a proof of claim relating to your claim. Attach copy of statement giving particulars.

☐ Check box if you have never received any notices from the bankruptcy court in this case.

☐ Check box if the address differs from the address on the envelope sent to you by the court.

THIS SPACE IS FOR COURT USE ONLY

ACCOUNT OR OTHER NUMBER BY WHICH CREDITOR IDENTIFIES DEBTOR:
Permit # ACT/007/007

Check here if this claim ☐ replaces ☒ amends a previously filed claim, dated: July 22, 199

1. BASIS FOR CLAIM

☐ Goods sold
☐ Services performed
☐ Money loaned
☐ Personal injury/wrongful death
☐ Taxes
☐ Other (Describe briefly)

☐ Retiree benefits as defined in 11 U.S.C. § 1114(a)
☐ Wages, salaries, and compensation (Fill out below)
Your social security number _____
Unpaid compensation for services performed
from _____ (date) to _____ (date)

Reclamation obligation under Federal & State Surface Mining Reclamation Acts

2. DATE DEBT WAS INCURRED
May 26, 1989

3. IF COURT JUDGMENT, DATE OBTAINED:

4. CLASSIFICATION OF CLAIM. Under the Bankruptcy Code all claims are classified as one or more of the following: (1) Unsecured nonpriority, (2) Unsecured Priority, (3) Secured. It is possible for part of a claim to be in one category and part in another.
CHECK THE APPROPRIATE BOX OR BOXES that best describe your claim and STATE THE AMOUNT OF THE CLAIM AT TIME CASE FILED.

☒ SECURED CLAIM $ 2,040,000
Attach evidence of perfection of security interest
Brief Description of Collateral:
☐ Real Estate ☐ Motor Vehicle ☒ Other (Describe briefly)

Trust Deed & collateral

Amount of arrearage and other charges at time case filed included in secured claim above, if any $ _____

☒ UNSECURED NONPRIORITY CLAIM $ 6,456,750
A claim is unsecured if there is no collateral or lien on property of the debtor securing the claim or to the extent that the value of such property is less than the amount of the claim.

☐ UNSECURED PRIORITY CLAIM $ 103,250,000
Specify the priority of the claim.
☐ Wages, salaries, or commissions (up to $2000), earned not more than 90 days before filing of the bankruptcy petition or cessation of the debtor's business, whichever is earlier—11 U.S.C. § 507(a)(3)
☐ Contributions to an employee benefit plan—11 U.S.C. § 507(a)(4)
☐ Up to $900 of deposits toward purchase, lease, or rental of property or services for personal, family, or household use—11 U.S.C. § 507(a)(6)
☐ Taxes or penalties of governmental units—11 U.S.C. § 507(a)(7)
☒ Other—Specify applicable paragraph of 11 U.S.C. § 507(a) (1)

5. TOTAL AMOUNT OF CLAIM AT TIME CASE FILED: $ 6,456,750 (Unsecured) $ 2,040,000 (Secured) $ 103,250 (Priority) $ 8.6 million (Total)

☒ Check this box if claim includes charges in addition to the principal amount of the claim. Attach itemized statement of all additional charges. See Ex. A

6. CREDITS AND SETOFFS: The amount of all payments on this claim has been credited and deducted for the purpose of making this proof of claim. In filing this claim, claimant has deducted all amounts that claimant owes to debtor.

7. SUPPORTING DOCUMENTS: *Attach copies of supporting documents*, such as promissory notes, purchase orders, invoices, itemized statements of running accounts, contracts, court judgments, or evidence of security interests. If the documents are not available, explain. If the documents are voluminous, attach a summary.

8. TIME-STAMPED COPY: To receive an acknowledgement of the filing of your claim, enclose a stamped, self-addressed envelope and copy of this proof of claim.

THIS SPACE IS FOR COURT USE ONLY

Date: 9/22/94

Sign and print the name and title, if any, of the creditor or other person authorized to file this claim (attach copy of power of attorney, if any)

James W. Carter, Director

Thomas E. Ehmett, Acting Director

Penalty for presenting fraudulent claim: Fine of up to $500,000 or imprisonment for up to 5 years, or both. 18 U.S.C. §§ 152 and 3571.

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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EXHIBIT NO "A"

September 23, 1994

Robert Burnham
Sunnyside Coal Company
1113 Spruce Street
Boulder, Colorado 80302

Re: Findings Concerning Required Performance Bond

Dear Mr. Burnham:

Attached to this letter is the Division's Findings dated September 23, 1994, which support the Division's determination that the required bond for the Sunnyside Mine is $8.6 million. Because the permittee is presently under the protection of the Bankruptcy Act, having filed for Chapter 11 relief in the Federal District Bankruptcy Court for the District of Colorado, the Division is not taking enforcement action to enforce this requirement at this time.

The Division believes that its appropriate relief in the first instance is to be found in the Bankruptcy Court. The Division is providing you with notice at this time of its bond Findings, and is providing these Findings to its attorneys to use in the proceedings before the Bankruptcy Court for the purpose of protecting its position as a creditor, as well as supporting its regulatory authority under the state statute. Subject to the approval of the Bankruptcy Court, the Division will enforce these Findings to the full extent provided by law.

If you have any questions or concerns regarding the Division's Findings and determination of bond amount, please feel free to contact me at any time.

Very truly yours,

James W. Carter
Director

lsj
Enclosure
FINDINGS.SSC

Analysis and Findings
Reclamation Bond Estimate
SUNNYSIDE COAL COMPANY
ACT/007/007
September 22, 1994

INTRODUCTION

These analysis and findings are made to determine the amount of the performance bond required for the Sunnyside Coal Mine, Sunnyside Coal Company (SCC), Permit ACT/007/007, in accordance with the requirements of R645-301-830.400 of the Utah coal mining rules. Evaluation of the bond amount required is necessary because the permittee has failed to meet regulatory requirements which can significantly affect the amount of performance bond required for reclamation. These deficiencies were enumerated in Division Order 94B which required the permittee to submit revised designs and plans for reclamation under the Utah Coal Regulatory Program.

In the findings section of this document, the bond amount required for the Sunnyside Coal Mine is found to be $8,600,000.

ANALYSIS

Disturbed Area Boundary

The permittee has failed to incorporate portal highwalls and face-up areas associated with active mine openings within the disturbed and bonded permit area.. The permittee has failed to include cut and fill areas associated with pads and roads currently used by mining operations. These cut and fill structures are an integral part of the roads, pads and other facilities used during mining operations. Drainages and diversions which were affected by current and previous mining operations have been excluded by the permittee from the disturbed and bonded areas in the plan. Without incorporation of these areas into the bonded and disturbed area boundaries, the permittee cannot effectively reclaim the area to meet post mining land use or approximate original contour requirements.

In a draft reclamation cost estimate submitted by Sunnyside Coal Company to the Division as Table III-24, revised 2/7/94, a summary of the disturbed areas acreages for the permit area was provided. This table indicates that the total disturbed area for the site totals 181.6 acres. An evaluation of the maps and aerial photography of the permit area shows that the disturbed area boundaries do not correspond to the areas indicated on the maps and drawings. The disturbed area boundaries on the current maps correlate only to surfaces of the pads and roads. These boundaries do not include the cut and fill areas above and below these features.

Any interpretation of the maps and drawings provided in the reclamation plan produce a wide variation in the amount of acres measured due in part to an inappropriate map scale of

1"=500' and the lack of map details on the drawings. Evaluation of the maps yielded disturbed area acres ranging from 200 to over 400 acres. Reliance on the information presented on the maps in the plan generated a moderate figure of 285 acres of total disturbed area for the purpose of cost estimation for bonding. In comparison to the 181.6 acres currently presented in the plan, this represents an increase in the disturbed area acreage of 103.4 acres.

The adjusted disturbed area acreages are shown in Table 2 - Disturbed Area Acreages. These adjusted acreages are for the purposes of cost estimation only. A more detailed delineation of these boundaries was required of SCC by Division Order 94B.

Land Use

Much of the cost estimation information provided in the plan by the permittee is based on alternate post mining land uses which would allow for the retention of certain structures and facilities including, but not limited to; offices, shops, pad areas, railroad spurs, and roads. Alternate post mining land use must be approved in accordance with the requirements of R645-301-413. Information regarding alternate post mining land use has not been received or approved by the Division. Therefore, adequate bond must be provided to reclaim the land to the pre-mining land use.

Criteria used for determining reclamation costs must take into account the possibility that if a proposed alternate land use fails to meet reclamation success standards for bond release, the site can be reclaimed to the pre-mining land use. The reclamation bond amount is the cost required to return the land to the original pre-mining land use following the cessation of mining operations. Any reductions based on an alternate land use which would effectively reduce the bond amount can not be allowed until such time as the area meets all other regulatory requirements for bond release. Bonding costs are therefore based on the costs for removal of structures and facilities and reconfiguration of the land to its pre-mining land use.

Currently, the plan lacks any specificity to allow the Division to approve any alternate post mining land uses.[1] A detailed reclamation plan does not exist which would show costs

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[1]Land use and facilities including utility corridors, right-of-ways, and facilities must be adequately described in the plan. The description must explain the constraints regarding those areas especially in regard to their affect on reclamation requirements and demonstrate that such use constitutes a higher and better land use than the pre mining land use. Alternate post mining land use is subject to a significant revision of the permit, public notice, and written approval by the landowner accepting the alternate post mining land use.

or cost savings from retention of any post mining structures or facilities. Therefore, no consideration has been given to such facilities in this estimate for the required bond amount.

Demolition and Removal

Costs for demolition and removal are found in Table 3 - Demolition and Removal of Facilities. The quantity and type of work described in this table relies on information provided by the permittee. The unit costs are derived from Means Cost Data, 1994.[2]

A summary sheet in Table 3, entitled Summary of Demolition Cost Using Off-Site Disposal, shows cost considerations involving demolition and removal where all foundations, footings, and demolition materials would be removed and all demolition materials would be disposed of off-site. The total cost for demolition and removal based on off-site disposal was found to be $4,077,576.

A second summary sheet in Table 3, entitled Summary of Demolition Cost Using On-Site Disposal and Burial, is also included to show cost savings that might be achieved if a specific reclamation plan were provided to address the final location and disposition of all foundations and demolition material. A significant reduction in the overall demolition cost is primarily due to the reduction of dump charges being reduced from $37.00 per cubic yard for disposal off-site to a landfill to $6.20 for burial of the materials on-site. A second possibility in lowering the demolition and removal cost is allowing 50% of the concrete footers and foundations to be buried in-place during backfilling operations reducing those costs by half. These two factors if proved feasible, reduce the overall demolition cost to $2,180,308. Although the plan has not detailed the extent to which in-place abandonment and burial of foundations and footers will occur, such considerations are reasonable in determination of the bond amount required.

While salvage values for materials and equipment is normally not part of the evaluation of reclamation costs for the determining the bonding amount, salvage values for the demolition and removal of these structures were evaluated and are included in the Summary of Demolition Cost for On-Site Disposal and Burial. Salvage value was based on 25% of the demolition cost for all structures of varying composition as noted in the cost summary. While certain structures and facilities may have a higher individual salvage value, similarly lower values would apply to concrete and masonry structures. The total amount of salvage value derived from the demolition cost was found to be $311,564. This amount however, cannot be incorporated as a reduction in the bond amount required for several

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[2]Means Heavy Construction Cost Data, 1994, 8th Annual Edition, R.S. Means Company, Inc., Kingston, MA.

reasons including variations in fair market value for salvaged materials, program requirements which do not allow property and assets directly pertaining to mining and related activities to be posted as collateral for bonding, and liens or other claims attaching to equipment or materials which may be senior to any claims by the Division for their salvage value.

Costs used in determination of the bond amount will exclude any salvage value, but do allow for on-site disposal and burial of foundations in-place where practical. Therefore, the bond requirement for demolition is $2,180,308 as shown in Table 3, Summary of Demolition Cost Using On-Site Disposal and Burial.

Mine Openings

A total of 42 mine openings exist within the permit area, 33 portals and 9 shafts. Some of these mine openings have been sealed to meet MSHA requirements, but have not been closed to meet requirements for permanent reclamation under the Coal Regulatory Program.[3] For the purposes of the bond amount required, the cost of sealing and reclaiming all mine openings is used since no bond release for any of these mine openings has occurred.

Although the work required for each mine opening varies and specific designs for each mine opening needs to be developed, the following is assumed only for the purposes of this cost estimate. All portals are to be closed by backfilling at a unit cost of $3,000 each. Shafts are found in primarily two different diameters, 16 feet and 7-8 feet in diameter. Shaft closure methods proposed in the current plan call for capping the shafts with a 6″ concrete pad, which meets MSHA requirements but does not provide for a permanent type of closure method for final reclamation. Backfilling of these shafts, because of their depth, is considered impractical in that they average 1,600 feet in depth. A suitable closure method for these shafts requires the construction of a reinforced concrete bulkhead capable of sealing the mine opening and supporting backfilled material over the shaft during reclamation backfilling and grading. Construction of the reinforced concrete bulkheads for the shafts has been estimated at $6,000 each for the 7-8′ diameter shafts and $12,750 each for the 16′ diameter shafts.

A summary of the total cost estimate for sealing mine openings is found in Table 4 -

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[3]SCC has ceased ventilation and dewatering of the mine workings. Incomplete and inadequate sealing of the mine openings at this time poses an immanent danger by allowing access into the mine openings. All openings should be at least temporarily closed as soon as possible to at least meet MSHA's requirements to minimize the hazards associated with access into the mine. Designs for reclamation in permanent closure of all mine openings is deficient in the current mining and reclamation plan and is a priority concern.

Closure of Mine Openings. The total cost for closure of the 42 mine openings is estimated at $103,250.

Earthwork

Backfilling and grading plans for reclamation of the surface facilities and operations are inadequate for the following reasons. (Refer also to Division Order 94B) Contour information on the drawings does not clearly show the location and the extent of the current mining operations and provides no detail with regard to the design detail for reclamation. No cross sections have been prepared by the permittee to show that slopes will be regraded to approximate the original pre-mining surface configuration. All of these are minimum requirements as required under R645-301.521 of the state coal rules. Detailed design information including maps, cross sections and mass balance calculations have not been provided to show that suitable reclamation of the surface operations can be accomplished.

Consequently, there are no detailed earthwork calculations available for evaluation by the Division. Cost estimation for earthwork can only be based on a more generalized, unit cost estimate. The failure of the permittee to accurately delineate the disturbed area boundary also affects the ability of the Division to determine the extent to which reclamation treatments, including backfilling and grading can be accomplished with reasonably available spoil materials.

This information is important because the site consists primarily of pre-SMCRA disturbances where no topsoil materials were salvaged for redistribution. The costs used in determining the bond amount consider the use of existing materials within the disturbed area as substitute topsoil materials. No imported soil materials are factored into the cost estimation. Coal mine waste and refuse materials within the permit area can be incorporated into the fills for highwall elimination and other large fill areas or hauled to the refuse disposal facilities jointly permitted by Sunnyside Coal Company and Sunnyside Cogeneration Associates. Adequate cover materials are believed to exist within the Sunnyside Cogeneration for use as a permanent refuse disposal facility by the permittee although it is no longer controlled by the permittee. No additional borrow areas are likely to be required for the Sunnyside Coal Company operations because all permanent refuse disposal facilities occur within the permit area owned and controlled by Sunnyside Cogeneration Associates.

The cost of backfilling and grading is based on unit cost calculations which are summarized in Table 5 - Reclamation Costs for Backfilling and Grading. the unit costs used for Backfilling and Regrading is based on an average regrading depth of 3 feet and a unit cost of $2.55 per cubic yard. The unit cost of $2.55 per cubic yard is an averaged cost for excavation, haulage, dumping, spreading and compaction of materials throughout the site. Normally the cost for backfilling and grading is based on mass balance calculations,

equipment selection, and productivity calculations in order to determined earthmoving costs. Due to the lack of any of this information in the plan, a more general unit cost is required. For the estimated 285 acres of disturbed area, the calculations yielded 1,379,400 cubic yards of backfilling at a cost of approximately $3,517,000.

Channel Reconstruction and Sediment Control

The plan indicates that no diversion structures are currently planned. Further, no plans requirements to re-establish the drainage areas affected by surface operations are found within the text of the plan.

Grassy Trail Creek has been channelized throughout most of the area affected by mining. Numerous operational disturbed area and undisturbed area diversions exist within the permit area which have altered natural drainage patterns. The permittee's failure to provide a comprehensive reclamation plan with designs and maps to show that drainage areas and permanent diversions are re-established as required by the rules is a subject of Division Order 94B.

For the purpose of determining the bond amount for the restoration of perennial stream channels such as Grassy Trail Creek and for ephemeral/intermittent channel reconstruction, it has been assumed that the elimination of operational diversions and channels which are no longer be needed during reclamation are included in the costs for general backfilling and grading. The cost for perennial stream channel reconstruction is estimated at $95 per lineal foot and for ephemeral/intermittent channel reconstruction at $45 per lineal foot. These costs are associated with the cost of channel reconstruction itself and not with the cost for general grading and earthwork required for re-establishment of the drainage systems.

Sediment control structures are required during phased reclamation activity and involve construction of temporary sediment ponds, diversions and other sediment control structures to maintain adequate sediment control until such time as vegetative growth is established for erosion protection. The plan lacks designs and timing for the installation and removal of such sediment control facilities. In lieu of such designs, a unit cost per acre has been developed for the site for determination of the bond amount. This unit cost for sediment control has been estimated at $350 per acre.

A summary of the cost estimates for channel construction and sediment control is found in Table 6 - Channel Reconstruction and Sediment Control Costs. The total amount estimated for this reclamation work is $580,500.

Revegetation Costs

The cost of revegetation is determined on a per acre basis. Specific treatments and costs associated with seedbed preparation, soil amendments, seed mixture, mulch, and application of seed and mulch are normally used to determine the reclamation costs associated with revegetation. The cost of revegetation is also be dependent on the amount and type of other reclamation work involved on the site as well as the intended post mining land use. However, due to the lack of specific reclamation designs and treatments necessary to determine these costs, a per unit cost of $500 per acre is adopted by the Division. A summary of the revegetation cost associated with the Sunnyside Mine is presented in Table 7 - Revegetation Costs. A total of $142,500 has been estimated for the cost of revegetation.

Other Costs Used for Determination of the Bond Amount

In addition to the specific areas of reclamation described above, several other costs are associated with the determination of the bond amount. These costs include costs of administration, design and engineering, maintenance and monitoring, and escalation of the bond amount. The Division has derived these costs from other performance bonds in Utah and actual reclamation experience. These cost factors have been incorporated into Table 1 - Summary of Reclamation Costs.

Administrative, design and engineering costs are those costs which would be required to develop specific engineering plans and specification for bidding and construction as well as those costs required to inspect and manage the site administratively throughout reclamation construction. For the purposes of this bond estimate the administrative, design and engineering costs are set at 6% of the reclamation costs.

Maintenance and monitoring costs are costs necessary to maintain and monitor the site to meet and demonstrate compliance with the performance standards required for reclamation and for reclamation success. These costs include surface water monitoring, vegetation monitoring, repairs and additional treatments which may be necessary to meet reclamation success throughout the ten-year bond liability period. For the purposes of this cost estimate, maintenance and monitoring costs are set at 6% of the reclamation costs.

Contingency costs are generally based on the reliability of the design information, the cost estimate provided by the operator and additional not factored into other areas of reclamation. Based on the amount of information provided in the approved reclamation plan, a contingency factor of 50% is justified. However, cost estimates set forth in this document have, to some extent, already anticipated these contingencies. Nonetheless, the lack of specificity in the reclamation plan warrants a substantial contingency factor. For the purposes of this cost estimate, the contingency factor is set at 10% of the reclamation costs.

Means Cost Data information is the basis for determining the escalation factor used by

the Division for all coal bonds. For 1994, this escalation factor has been determined to be 2.01% per year. Bonds are escalated to allow for future costs which may be incurred over the permit term. Accordingly, bonds are normally escalated for a 5-year period to ensure adequate bond over the permit term. A memo showing the escalation factor has been attached to this document following the above referenced tables. Calculations used for projecting the escalation factor require compounding the amount at the escalation rate for four years only since the cost estimate allows for the cost in 1994 dollars.

Summary of Reclamation Costs

A summary of the reclamation costs used in determining the bond amount for the Sunnyside Coal Mine are provided in Table 1 - Summary of Reclamation Costs. Demolition and removal costs, closure of mine openings, backfilling and grading, channel reconstruction and sediment control, and revegetation costs constitute the reclamation costs for these specific reclamation treatments. The subtotal of the cost is $6,524,028. In addition to these direct costs for reclamation other costs including administrative, design and engineering, maintenance and monitoring and contingency costs, which increase the amount required for the performance bond by an additional $1,435,286. Escalation of the bond amount for the 5-year period associated with the permit term contributes an additional $659,483 to the bond amount. The total bond amount required is rounded to the nearest $100,000, and is $8,600,000.

Other Cost Estimate Information

In addition to the Division's analysis and estimate of the bond amount, OSM has also conducted an evaluation of the bond amount required based on information collected by OSM and an evaluation of draft cost information provided in that analysis. A summary of this information can be found as an attachment following this analysis as a Memorandum from Karen F. Jass, Mining Engineer, OSM dated September 14, 1994. The consensus of both regulatory authorities is that a bond in the amount of $8,600,000 is required.

The variation in the conditions and assumptions regarding the site work required due to the lack of specificity in the plan produced a wide range of possible bond calculations by both the Division and OSM ranging from $4.8 to $28.4 million. The most significant costs associated involved the possibility of the removal of contaminated soils and PCB transformers which varied from $80,000 to $5,000,000. Additionally, backfilling and grading costs involving the source of the materials to be used for backfilling and grading and topsoil caused the cost estimates to range from $300,000 to over $9,000,000 for regrading costs. This type of cost fluctuation can be expected due to the lack of information presented in the plan regarding reclamation designs. Without clear and specific designs demonstrating compliance with the coal program, a definitive cost estimate for actual reclamation cannot be readily

determined.

Determination of Bond Amount Required

Based on the estimate presented in these analysis, the bond amount is set at $8,600,000. Although this amount is not the highest amount which may be justified, it does demonstrate a reasonable amount required for bonding. This bond amount could change if the permittee submitted a detailed and approvable reclamation plan with appropriate designs and cost information.

Bond Amount Required in Comparison to Actual Reclamation Costs

The determination of the bond amount required by the Division is not intended to be a prediction of the amount a permittee will spend to perform reclamation. Rather it is a determination the regulatory authority is required to make, which predicts what the state would spend if it was required to perform reclamation. While experience has shown that the amount of the performance bond is predictive of the magnitude of the reclamation obligation, in this case, it may understate the permittee's actual costs. This is true, because the state's reclamation costs under bond forfeiture do not reflect the more rigorous performance standards that a non-defaulting permittee is required to incur.

FINDINGS

The minimum bond amount required for the Sunnyside Coal Company is $8,600,000. This bond amount is required to be posted by Sunnyside Coal Company. R645-301-830.400.

ORDER

Sunnyside Coal Company is in non-compliance with the Utah State Coal Program. As found at R645-301-830.400. In order to comply with the requirements of this section, Sunnyside Coal Company must provide a performance bond in the total amount of $8.6 million.

Ordered this 22nd day of September, 1994, by the Division of Oil, Gas, and Mining.

James W. Carter, Director
Division of Oil, Gas and Mining

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:

SEP 19
DIV. OF OIL, GAS & MINING

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 furhter 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)
$	139,029	(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

TABLE 1 - SUMMARY OF RECLAMATION COSTS

This summary of reclamation costs for determination of the bond amount are based on those assumptions found in Tables 2 through 7 and as further explained in the analysis and findings.

TABLE	DESCRIPTION	SUBTOTALS	BOND AMOUNT REQUIRED Until detail is provided for reclamation design
2	Disturbed Area Acreage	285.0	
3	Demolition and Removal of Facilities		
	Off-Site Disposal	$3,805,165	
	On-Site Disposal and Burial	$2,180,308	$2,180,308
	Salvage Value	($311,564)	
4	Closure of Mine Openings	$103,250	$103,250
5	Backfilling and Grading	$3,517,470	$3,517,470
6	Channel Reconstruction and Sediment Control	$580,500	$580,500
7	Revegetation	$142,500	$142,500
	Subtotal Reclamation Costs		$6,524,028
	Other Costs		
	Administrative, Design and Engineering @ 6%		$391,442
	Maintenance and Monitoring @ 6%		$391,442
	Contingency @ 10%		$652,403
	Subtotal Other Costs		$1,435,286
	Subtotal Escalation @ 2.01% per yr for 4 yrs		$659,483
	Total Bond Amount Required (rounded to the nearest $100.000)		$8,600,000

TABLE 2 - DISTURBED AREA ACREAGES			Page 1
			ADJUSTED
AREA	DESCRIPTION	ACRES	ACRES
1	Surface Facilities Area	65.0	90.0
	Railroad Right-of-Way (Permanent)	4.5	5.0
	Permanent Road to No. 2 Canyon	2.8	9.0
	Subtotal	72.3	104.0
2	Fan Canyon - No. 2 Mine Fan Pad	1.3	3.0
	Fan Canyon Road	2.0	6.0
	Subtotal	3.3	9.0
3	Whitmore Fan Shaft Area	6.3	8.0
	Whitmore Return Shaft Area	0.9	2.0
	Subtotal	7.2	10.0
4	No. 2 Canyon Yard	6.4	13.0
	Permanent No. 2 Canyon Road	6.2	15.0
	No. 2 Canyon Fan Pad & Access Road	1.5	5.0
	Subtotal	14.1	33.0
5	Water Canyon Portals - No. 2 Mine	2.2	4.0
	Water Canyon Refuse Area	3.7	4.0
	Water Canyon Road	5.4	15.0
	Subtotal	11.3	23.0
6	Manshaft Substation Area	5.7	6.0
	Twinshaft Mine-Water Pond	3.5	4.0
	Permanent West Ridge Road	1.3	4.0
	Whitmore Canyon County Road	1.1	2.0
	Reclamation Test Plot	0.1	1.0
	Subtotal	11.7	17.0

TABLE 2 - DISTURBED AREA ACREAGES

AREA	DESCRIPTION	ACRES	ADJUSTED ACRES
7	Rail Loop Area Plate III-2	12.6	23.0
	Plate III - 23	12.6	13.0
	Railroad Right-of-Way (Permanent)	1.1	2.0
	Subtotal	26.3	38.0
8	Outcrop Fan Road	6.4	10.0
	Outcrop Power Line Corridor	8.4	10.0
	Outcrop Fan Pad - No. 1 Mine	2.0	3.0
	Subtotal	16.8	23.0
9	Pole Canyon Shaft Pad & Access Road	1.3	5.0
	Permanent Pole Canyon Road	1.8	6.0
	002B Mine-Water Pond	2.6	3.0
	Manshaft - Twinshaft	12.9	14.0
	Subtotal	18.6	28.0
	TOTALS	181.6	285.0

Acres provided in this table correspond to draft information regarding boning costs by Sunnyside Coal Company as Table III-24, revised 2/7/94. Adjusted acres shown in the table represent an estimated total disturbed area which incorporates additional areas into the disturbed area to offset discrepancies in the maps and plan information provided by SCC. These adjusted acres are for the purposes of cost estimation only until such time the SCC can provide detailed maps and cost information.

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
DETAILED BREAKDOWN OF UNIT QUANTITIES FOR DEMOLITION AND REMOVAL							
Cleanup							
General Cleanup	General Cleanup	$1,000.00	AC	285	AC		
PCB Removal	Oil Disposal	$7.50	GL	2,500	GL		
Oil Contaminated Soils	Soil Disposal	$45.00	CY	1,700	CY		
Power Lines							
Remove Poles	Pole	$100.00	EA	88	EA		
Minewater Pipelines							
Remove Pipelines	Remove Pipe	$1.87	LF	7,700	LF		
Parking Lot							
Remove Pavement	Pavement removal, bituminous, 3" thick	$3.90	SY	11,400	SY		
Disp. of Pavement	Add for disposal, on site	$6.20	CY	1,235	CY		
Materials Track							
Track Removal	Remove ties and track	$15.80	LF	5,400	LF		
Remove Ballast	Ballast	$3.47	CY	2,400	CY		
Ballast Disp.	Add for disposal, on site	$6.20	CY	2,400	CY		
Main Office							
Structure	Mixture of type, average	$0.21	CF	36,210	CF		
Dump Charge	Demolition Materials	$37.00	CY	469	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,550	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	61	CY		
Footer Demo.	1.5'x2'	$12.70	LF	202	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	19	CY		
Warehouse							
Structure	Mixture of type, average	$0.21	CF	329,544	CF		
Dump Charge	Demolition Materials	$37.00	CY	4,272	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	14,328	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	345	CY		
Footer Demo.	1.5'x3'	$15.90	LF	542	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	117	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Main Changehouse							
Structure	Mixture of type, average	$0.21	CF	285,775	CF		
Dump Charge	Demolition Materials	$37.00	CY	3,704	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	12,425	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	299	CY		
Footer Demo.	1.5'x2'	$12.70	LF	492	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	107	CY		
Training Building							
Structure	Mixture of type, average	$0.21	CF	75,480	CF		
Dump Charge	Demolition Materials	$37.00	CY	978	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	4,440	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	107	CY		
Footer Demo.	1.5'x2'	$12.70	LF	314	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	68	CY		
Shop							
Structure	Mixture of type, average	$0.21	CF	762,348	CF		
Dump Charge	Demolition Materials	$37.00	CY	9,882	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	20,604	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	496	CY		
Footer Demo.	1.5'x2'	$12.70	LF	608	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	132	CY		
Warehouse Annex							
Structure	Mixture of type, average	$0.21	CF	82,620	CF		
Dump Charge	Demolition Materials	$37.00	CY	1,071	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	6,120	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	147	CY		
Footer Demo.	1.5'x3'	$15.90	LF	468	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	101	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Engineering Office							
Structure	Mixture of type, average	$0.21	CF	28,431	CF		
Dump Charge	Demolition Materials	$37.00	CY	369	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,106	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	51	CY		
Footer Demo.	1.5'x2'	$12.70	LF	186	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	40	CY		
Backfill Building							
Structure	Concrete	$0.29	CF	214,326	CF		
Dump Charge	Demolition Materials	$37.00	CY	2,778	CY		
Foundation Demo.	Mesh reinforcing	$96.00	CY	221	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	287	CY		
Footer Demo.	1.5'x3'	$15.90	LF	260	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	56	CY		
Preparation Plant							
Structure	Concrete	$0.29	CF	480,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	6,222	CY		
Foundation Demo.	Mesh reinforcing	$96.00	CY	1,067	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	1,387	CY		
Footer Demo.	2'x3'	$18.10	LF	400	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	87	CY		
Crusher							
Structure	Concrete	$0.29	CF	70,200	CF		
Dump Charge	Demolition Materials	$37.00	CY	910	CY		
Foundation Demo.	Mesh reinforcing	$96.00	CY	200	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	260	CY		
Footer Demo.	2'x3'	$18.10	LF	180	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	39	CY		

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Blending Bins							
Structure	Concrete	$0.29	CF	338,100	CF		
Dump Charge	Demolition Materials	$37.00	CY	4,383	CY		
Foundation Demo.	Mesh reinforcing	$96.00	CY	544	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	707	CY		
Footer Demo.	2'x3'	$18.10	LF	350	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	76	CY		
Clean Coal Stockpile Belt							
Concrete Pier							
Foundation Demo.	Mesh reinforcing	$96.00	CY	7	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	9	CY		
Concrete Pier							
Foundation Demo.	Mesh reinforcing	$96.00	CY	7	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	9	CY		
Concrete Pier - 2							
Foundation Demo.	Mesh reinforcing	$96.00	CY	14	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	18	CY		
Concrete Pier at Tower							
Foundation Demo.	Mesh reinforcing	$96.00	CY	25	CY		
Foundation Disp.	Ad' for disposal, on site	$6.20	CY	34	CY		
Concrete Pier - 14							
Foundation Demo.	Mesh reinforcing	$96.00	CY	28	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	36	CY		
Loadout Conveyor							
Conveyer	Conveyor Removal	$15.04	LF	1,230	LF		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Rotary Car Dump							
Structure	Concrete	$0.29	CF	720	CF		
Dump Charge	Demolition Materials	$37.00	CY	9	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	100	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	2	CY		
Footer Demo.	2'x3'	$18.10	LF	40	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	9	CY		
Prep Plant Office							
Structure	Masonry	$0.21	CF	2,848	CF		
Dump Charge	Demolition Materials	$37.00	CY	37	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	320	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	8	CY		
Footer Demo.	1.5'x2'	$12.70	LF	72	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	16	CY		
Prep Plant Belt MCC Bldg							
Structure	Masonry	$0.21	CF	3,658	CF		
Dump Charge	Demolition Materials	$37.00	CY	47	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	389	SF		
Foundation Disp.	Ad' for disposal, on site	$6.20	CY	9	CY		
Footer Demo.	1.5'x2'	$12.70	LF	79	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	17	CY		
Material Foreman's Office							
Structure	Masonry	$0.21	CF	2,592	CF		
Dump Charge	Demolition Materials	$37.00	CY	34	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	320	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	8	CY		
Footer Demo.	1.5'x2'	$12.70	LF	72	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	16	CY		

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Hoist House No.3 Mine							
Structure	Concrete	$0.29	CF	38,016	CF		
Dump Charge	Demolition Materials	$37.00	CY	493	CY		
Foundation Demo.	Mesh reinforcing	$96.00	CY	117	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	152	CY		
Footer Demo.	2'x3'	$18.10	LF	194	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	42	CY		
No.3 Slope Ramp Walls							
Wall Demo	8" thick	$1.70	SF	1,050	SF		
Wall Disp.	Add for disposal, on site	$6.20	CY	51	CY		
Manshaft Bathhouse							
Structure	Mixture of type, average	$0.21	CF	60,800	CF		
Dump Charge	Demolition Materials	$37.00	CY	788	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	4,000	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	96	CY		
Footer Demo.	1.5'x2'	$12.70	LF	280	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	61	CY		
Manshaft Bathhouse							
Structure	Masonry	$0.21	CF	7,387	CF		
Dump Charge	Demolition Materials	$37.00	CY	96	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	648	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	16	CY		
Footer Demo.	1.5'x2'	$12.70	LF	102	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	22	CY		
Headframe Manshaft							
Structure	Mixture of type, average	$0.21	CF	7,200	CF		
Dump Charge	Demolition Materials	$37.00	CY	93	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	180	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	4	CY		
Footer Demo.	1.5'x2'	$12.70	LF	54	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	12	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Bulk Rock Dust Tank							
Structure	Mixture of type, average	$0.21	CF	1,507	CF		
Dump Charge	Demolition Materials	$37.00	CY	20	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	64	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	2	CY		
Footer Demo.	1.5'x3'	$15.90	LF	32	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	7	CY		
No 3 Mine Milk Building							
Structure	Mixture of type, average	$0.21	CF	3,465	CF		
Dump Charge	Demolition Materials	$37.00	CY	45	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	398	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	10	CY		
Footer Demo.	2'x3'	$18.10	LF	80	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	17	CY		
Garage @ Mouth No. 2 Cyn							
Structure	Mixture of type, average	$0.21	CF	6,048	CF		
Dump Charge	Demolition Materials	$37.00	CY	78	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	672	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	16	CY		
Footer Demo.	1.5'x2'	$12.70	LF	104	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	23	CY		
No. 2 Canyon Trestle Bldg.							
Structure	Concrete	$0.29	CF	4,453	CF		
Dump Charge	Demolition Materials	$37.00	CY	58	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	405	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	10	CY		
Footer Demo.	1.5'x3'	$15.90	LF	83	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	18	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
No.2 Canyon Repair Shop							
Structure	Mixture of type, average	$0.21	CF	1,762	CF		
Dump Charge	Demolition Materials	$37.00	CY	23	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	198	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	5	CY		
Footer Demo.	1.5'x3'	$15.90	LF	57	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	12	CY		
No. 2 Canyon Material Shed							
Structure	Mixture of type, average	$0.21	CF	22,698	CF		
Dump Charge	Demolition Materials	$37.00	CY	294	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,522	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	61	CY		
Footer Demo.	1.5'x3'	$15.90	LF	299	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	65	CY		
Manshaft Milk Building							
Structure	Mixture of type, average	$0.21	CF	2,394	CF		
Dump Charge	Demolition Materials	$37.00	CY	31	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	252	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	6	CY		
Footer Demo.	1.5'x3'	$15.90	LF	64	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	14	CY		
Substation, Outcrop							
Structure	Mixture of type, average	$0.21	CF	50,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	648	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	60	CY		
Footer Demo.	1.5'x2'	$12.70	LF	200	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	43	CY		
Transformer	750 KVA	$735.00	EA	1	EA		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Substation, Hillside							
Structure	Mixture of type, average	$0.21	CF	50,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	648	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	60	CY		
Footer Demo.	1.5'x2'	$12.70	LF	200	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	43	CY		
Transformer	750 KVA	$735.00	EA	1	EA		
Substation, Roadside							
Structure	Mixture of type, average	$0.21	CF	50,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	648	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	60	CY		
Footer Demo.	1.5'x2'	$12.70	LF	200	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	43	CY		
Transformer	750 KVA	$735.00	EA	1	EA		
Substation, Whitmore fan							
Structure	Mixture of type, average	$0.21	CF	50,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	648	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	60	CY		
Footer Demo.	1.5'x2'	$12.70	LF	200	LF		
Footer Disp.	Add for dibposal, on site	$6.20	CY	43	CY		
Transformer	750 KVA	$735.00	EA	1	EA		
Substation, Manshaft							
Structure	Mixture of type, average	$0.21	CF	50,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	648	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	60	CY		
Footer Demo.	1.5'x2'	$12.70	LF	200	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	43	CY		
Transformer	750 KVA	$735.00	EA	1	EA		

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Fan, Shop Fan							
Structure	Mixture of type, average	$0.21	CF	18,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	233	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	1,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	36	CY		
Footer Demo.	1.5'x3'	$15.90	LF	170	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	37	CY		
Fan, No. 2 Cyn Air Shaft	Removed 1993						
Fan, Outcrop							
Structure	Mixture of type, average	$0.21	CF	18,000	CF		
Duip Charge	Demolition Materials	$37.00	CY	233	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	1,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	36	CY		
Footer Demo.	1.5'x3'	$15.90	LF	170	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	37	CY		
Fan, Whitmore Cyn							
Structure	Mixture of type, average	$0.21	CF	18,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	233	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	1,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	36	CY		
Footer Demo.	1.5'x3'	$15.90	LF	170	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	37	CY		
Fan, Twin Shafts							
Structure	Mixture of type, average	$0.21	CF	18,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	233	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	1,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	36	CY		
Footer Demo.	1.5'x3'	$15.90	LF	170	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	37	CY		

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Power Magazine							
Structure	Concrete	$0.29	CF	960	CF		
Dump Charge	Demolition Materials	$37.00	CY	12	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	120	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	3	CY		
Footer Demo.	1.5'x2'	$12.70	LF	44	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	10	CY		
Detonator Caps Magazine							
Structure	Concrete	$0.29	CF	960	CF		
Dump Charge	Demolition Materials	$37.00	CY	12	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	120	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	3	CY		
Footer Demo.	1.5'x2'	$12.70	LF	44	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	10	CY		
Mine Water Tank (015)							
Structure	Mixture of type, average	$0.21	CF	69,237	CF		
Dump Charge	Demolition Materials	$37.00	CY	898	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	3,847	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	93	CY		
Footer Demo.	2'x3'	$18.10	LF	140	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	30	CY		
Mine Water Tank (015)							
Structure	Mixture of type, average	$0.21	CF	69,237	CF		
Dump Charge	Demolition Materials	$37.00	CY	898	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	3,847	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	93	CY		
Footer Demo.	2'x3'	$18.10	LF	140	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	30	CY		

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Other Facilities Show on Maps But Not Found in Estimate by Permittee							
No. 3 Slope Belt Building							
Structure	Mixture of type, average	$0.21	CF	13,500	CF		
Dump Charge	Demolition Materials	$37.00	CY	500	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	1,200	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	600	CY		
Footer Demo.	2'x3'	$18.10	LF	150	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	16	CY		
Wood Retaining Walls, No. 2 Canyon							
Structure	Mixture of type, average	$0.21	CF	5,860	CF		
Dump Charge	Demolition Materials	$37.00	CY	217	CY		
Boiler Foundation							
Foundation Demo.	Mesh reinforcing	$96.00	CY	28	CY		
Foundation Disp.	Add for disposal, on site	$6.20	CY	28	CY		
Footer Demo.	2'x3'	$18.10	LF	90	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	10	CY		
Diesel Fuel Storage Tanks							
Structure	Mixture of type, average	$0.21	CF	4,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	4	CY		
Footer Demo.	2'x3'	$18.10	LF	160	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	16	CY		
Bridge, No. 2 Canyon							
Structure	Mixture of type, average	$0.21	CF	2,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	74	CY		
Underground Railroad Tunnel at Loadout							
Structure	Mixture of type, average	$0.21	CF	11,340	CF		
Dump Charge	Demolition Materials	$37.00	CY	420	CY		
Footer Demo.	2'x3'	$18.10	LF	500	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	122	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Thickener 120' dia.							
Footer Demo.	2'x3'	$18.10	LF	378	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	70	CY		
Fence Removal							
Chain Link Bence	Removal	$0.71	LF	2,181	LF		
Barbed Wire Fence	Removal	$1.55	LF	471	LF		
Guard Rails - Road							
Guard Rails	Dismantle	$3.58	LF	3,800	LF		
Dump Charge	Demolition Materials	$37.00	CY	500	CY		
Bridge Engineering Building							
Structure	Mixture of type, average	$0.21	CF	14,400	CF		
Dump Charge	Demolition Materials	$37.00	CY	533	CY		
Footer Demo.	2'x3'	$18.10	LF	60	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	14	CY		
Mantrip Underpass & Rockslope Tunnel No. 1							
Structure	Mixture of type, average	$0.21	CF	111	CF		
Dump Charge	Demolition Materials	$37.00	CY	4	CY		
Footer Demo.	2'x3'	$18.10	LF	80	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	8	CY		
Shop Fan							
Structure	Mixture of type, average	$0.21	CF	4,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	296	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	2,500	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	8	CY		
Footer Demo.	2'x3'	$18.10	LF	200	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	12	CY		
Concrete Retaining Wall - Bathhouse							
Wall Demo	8" thick	$1.70	SF	2,400	SF		
Wall Disp.	Add for disposal, on site	$6.20	CY	64	CY		
Footer Demo.	2'x3'	$18.10	LF	300	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	34	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
Manshaft Water Tank							
Structure	Mixture of type, average	$0.21	CF	69,237	CF		
Dump Charge	Demolition Materials	$37.00	CY	898	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	7,694	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	186	CY		
Footer Demo.	2'x3'	$18.10	LF	280	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	60	CY		
Manshaft Pump House							
Structure	Mixture of type, average	$0.21	CF	3,200	CF		
Dump Charge	Demolition Materials	$37.00	CY	118	CY		
Foundation Demo.	6" thick reinforced	$4.64	SF	400	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	8	CY		
Footer Demo.	2'x3'	$18.10	LF	80	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	8	CY		
Outcrop - Concrete Pad							
Foundation Demo.	6" thick reinforced	$4.64	SF	100	SF		
Foundation Disp.	Add for disposal, on site	$6.20	CY	2	CY		
Footer Demo.	2'x3'	$18.10	LF	40	LF		
Footer Disp.	Add for disposal, on site	$6.20	CY	4	CY		
Trolley Wire and Support Structures							
Structure	Mixture of type, average	$0.21	CF	7,000	CF		
Dump Charge	Demolition Materials	$37.00	CY	260	CY		

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
SUMMARY OF DEMOLITION COST USING OFF-SITE DISPOSAL							
General Cleanup	General Cleanup	$1,000.00	AC	285	AC	$285,000	
PCB Removal	Oil Disposal	$7.50	GL	2,500	GL	$18,750	
Oil Contaminated Soils	Soil Disposal	$45.00	CY	1,700	CY	$76,500	
Remove Poles	Pole	$100.00	EA	88	EA	$8,800	
Remove Pipelines	Remove Pipe	$1.87	LF	7,700	LF	$14,399	
Remove Pavement	Pavement removal, bituminous, 3" thick	$3.90	SY	11,400	SY	$44,460	
Disp. of Pavement	Add for disposal, on site	$6.20	CY	1,235	CY	$7,657	
Track Removal	Remove ties and track	$15.80	LF	5,400	LF	$85,320	
Remove Ballast	Ballast	$3.47	CY	2,400	CY	$8,328	
Ballast Disp.	Add for disposal, on site	$6.20	CY	2,400	CY	$14,880	
Chain Link Fence	Removal	$0.71	LF	2,181	LF	$1,549	
Barbed Wire Fence	Removal	$1.55	LF	471	LF	$730	
Guard Rails	Dismantle	$3.58	LF	3,800	LF	$13,604	
Structure	Mixture of type, average	$0.21	CF	2,295,544	CF	$482,064	
Structure	Concrete	$0.29	CF	1,147,735	CF	$332,843	
Structure	Masonry	$0.21	CF	16,485	CF	$3,462	
Dump Charge	Demolition Materials	$37.00	CY	46,357	CY	$1,715,209	
Foundation Demo.	6" thick reinforced	$4.64	SF	111,269	SF	$516,288	
Foundation Demo.	Mesh reinforcing	$96.00	CY	2,258	CY	$216,768	
Foundation Disp.	Add for disposal, on site	$6.20	CY	6,126	CY	$37,981	
Footer Demo.	1.5'x2'	$12.70	LF	3,653	LF	$46,393	
Footer Demo.	1.5'x3'	$15.90	LF	2,485	LF	$39,512	
Footer Demo.	2'x3'	$18.10	LF	3,842	LF	$69,540	
Footer Disp.	Add for disposal, on site	$6.20	CY	2,010	CY	$12,462	
Wall Demo	8" thick	$1.70	SF	3,450	SF	$5,865	
Wall Disp.	Add for disposal, on site	$6.20	CY	115	CY	$713	
Conveyer	Conveyor Removal	$15.04	LF	1,230	LF	$18,499	
TOTAL - WORST CASE SCENARIO FOR DEMOLITION AND REMOVAL						**$4,077,576**	

TABLE 3 - DEMOLITION AND REMOVAL OF FACILITIES

DESCRIPTION	MATERIALS	UNIT COST	UNIT	QUANTITY	UNIT	TOTAL	COMMENT
SUMMARY OF DEMOLITION COST USING ON-SITE DISPOSAL AND BURIAL.							
SALVAGE VALUES (BASED ON 25% OF DEMOLITION COSTS) SHOWN IN COMMENTS							
General Cleanup	General Cleanup	$1,000.00	AC	285	AC	$285,000	($71,250)
PCB Removal	Oil Disposal	$7.50	GL	2,500	GL	$18,750	NO SALVAGE VALUE
Oil Contaminated Soils	Soil Disposal	$45.00	CY	1,700	CY	$76,500	NO SALVAGE VALUE
Remove Poles	Pole	$100.00	EA	88	EA	$8,800	($2,200)
Remove Pipelines	Remove Pipe	$1.87	LF	7,700	LF	$14,399	($3,600)
Remove Pavement	Pavement removal, bituminous, 3" thick	$3.90	SY	11,400	SY	$44,460	NO SALVAGE VALUE
Disp. of Pavement	Add for disposal, on site	$6.20	CY	1,235	CY	$7,657	NO SALVAGE VALUE
Track Removal	Remove ties and track	$15.80	LF	5,400	LF	$85,320	($21,330)
Remove Ballast	Ballast	$3.47	CY	2,400	CY	$8,328	NO SALVAGE VALUE
Ballast Disp.	Add for disposal, on site	$6.20	CY	2,400	CY	$14,880	NO SALVAGE VALUE
Chain Link Fence	Removal	$0.71	LF	2,181	LF	$1,549	($387)
Barbed Wire Fence	Removal	$1.55	LF	471	LF	$730	($183)
Guard Rails	Dismantle	$3.58	LF	3,800	LF	$13,604	($3,401)
Structure	Mixture of type, average	$0.21	CF	2,295,544	CF	$482,064	($120,516)
Structure	Concrete	$0.29	CF	1,147,735	CF	$332,843	($83,211)
Structure	Masonry	$0.21	CF	16,485	CF	$3,462	($865)
Dump Charge	Demolition Materials	$6.20	CY	46,357	CY	$287,413	ON SITE DISPOSAL
Foundation Demo.	6" thick reinforced	$4.64	SF	111,269	SF	$258,144	50% Demolition 50% Buried in Place
Foundation Demo.	Iesh reinforcing	$96.00	CY	2,258	CY	$108,384	50% Demolition 50% Buried in Place
Foundation Disp.	Add for disposal, on site	$6.20	CY	6,126	CY	$18,991	50% Demolition 50% Buried in Place
Footer Demo.	1.5'x2'	$12.70	LF	3,653	LF	$23,197	50% Demolition 50% Buried in Place
Footer Demo.	1.5'x3'	$15.90	LF	2,485	LF	$19,756	50% Demolition 50% Buried in Place
Footer Demo.	2'x3'	$18.10	LF	3,842	LF	$34,770	50% Demolition 50% Buried in Place
Footer Disp.	Add for disposal, on site	$6.20	CY	2,010	CY	$6,231	50% Demolition 50% Buried in Place
Wall Demo	8" thick	$1.70	SF	3,450	SF	$5,865	NO SALVAGE VALUE
Wall Disp.	Add for disposal, on site	$6.20	CY	115	CY	$713	NO SALVAGE VALUE
Conveyer	Conveyor Removal	$15.04	LF	1,230	LF	$18,499	($4,625)
TOTALS - DEMOLITION AND ON-SITE BURIAL AND SALVAGE VALUES						**$2,180,308**	($311,564)

TABLE 4 - CLOSURE OF MINE OPENINGS

The unit cost per mine opening assume an average cost per opening and is not specific to each individual opening for the purposes of determining bonding costs.

AREA	DESCRIPTION	MINE OPENINGS	COST PER OPENING	AMOUNT
1	Surface Facilities Area Portals	5	$3,000	$15,000
	16' dia shafts	1	$12,750	$12,750
2	Fan Canyon - No. 2 Mine Area Portals	3	$500	$1,500
3	Whitmore Fan Shaft Area Portals	0	$500	$0
	16' dia shafts	2	$12,750	$25,500
4	No. 2 Canyon Yard Area	3	$500	$1,500
	7-8' dia shafts	1	$6,000	$6,000
5	Water Canyon Portals - No. 2 Mine Area	8	$500	$4,000
6	Manshaft Substation Area	0	$500	$0
7	Rail Loop Area	3	$500	$1,500
8	Outcrop Fan Area	10	$500	$5,000
	7-8' dia shafts	1	$6,000	$6,000
9	Pole Canyon Area	1	$500	$500
	7-8' dia shafts	4	$6,000	$24,000
	TOTALS	42		$103,250

TABLE 5 - RECLAMATION COSTS FOR BACKFILLING AND GRADING

			BACKFILL AND REGRADING	
AREA	DESCRIPTION	ACRES	YD3	AMOUNT
1	Surface Facilities Area	104.0	503,360	$1,283,568
2	Fan Canyon - No. 2 Mine Area	9.0	43,560	$111,078
3	Whitmore Fan Shaft Area	10.0	48,400	$123,420
4	No. 2 Canyon Yard Area	33.0	159,720	$407,286
5	Water Canyon Portals - No. 2 Mine Area	23.0	111,320	$283,866
6	Manshaft Substation Area	17.0	82,280	$209,814
7	Rail Loop Area	38.0	183,920	$468,996
8	Outcrop Fan Area	23.0	111,320	$283,866
9	Pole Canyon Area	28.0	135,520	$345,576
	TOTALS	285.0	1,379,400	$3,517,470

Backfilling and regrading is based on an average regrading depth of 3.0 feet. The unit cost for regrading includes an average cost for mixed earthmoving and earthwork activities, including dozing, load-haul-dump of fill material, grading and ripping. This unit cost has been estimated at $2.55 per cubic yard based on similar earthmoving and sitework costs. These costs do not allow for or include any costs associated with importing material from off-site. Generally, more specific equipment and productivity costs are used for earthwork calculations but due to the lack of specific and detailed reclamation designs treatments, this more generalized method has been used to evaluate costs for bonding purposes only.

TABLE 6 - CHANNEL RECONSTRUCTION AND SEDIMENT CONTROL COSTS

The unit cost per acre for sediment control includes costs for sediment pond construction and maintenance or other sediment control measures as necessary including but not limited to straw bales, silt fences and temporary surface diversion. Channel construction is for the installation of permanent surface diversion to restore drainage areas to pre-mining conditions.

AREA	DESCRIPTION	ACRES	COST PER ACRE/LF	AMOUNT
1	Surface Facilities Area	104.0	$350	$36,400
	Perennial Channel Reconstruction - lineal feet	3,000.0	$95	$285,000
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	1,500.0	$45	$67,500
2	Fan Canyon - No. 2 Mine Area	9.0	$350	$3,150
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	500.0	$45	$22,500
3	Whitmore Fan Shaft Area	10.0	$350	$3,500
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	100.0	$45	$4,500
4	No. 2 Canyon Yard Area	33.0	$350	$11,550
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	350.0	$45	$15,750
5	Water Canyon Portals - No. 2 Mine Area	23.0	$350	$8,050
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	250.0	$45	$11,250
6	Manshaft Substation Area	17.0	$350	$5,950
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	150.0	$45	$6,750
7	Rail Loop Area	38.0	$350	$13,300
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	500.0	$45	$22,500
8	Outcrop Fan Area	23.0	$350	$8,050
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	500.0	$45	$22,500
9	Pole Canyon Area	28.0	$350	$9,800
	Ephemeral/Intermittent Channel Reconstruction - lineal feet	500.0	$45	$22,500
	TOTALS			$580,500

TABLE 7 - REVEGETATION COSTS

The unit cost per acre for revegetation includes topsoil preparation (not placement), soil sampling and soil amendments, seed, mulch and application.

AREA	DESCRIPTION	ACRES	COST PER ACRE	AMOUNT
1	Surface Facilities Area	104.0	$500	$52,000
2	Fan Canyon - No. 2 Mine Area	9.0	$500	$4,500
3	Whitmore Fan Shaft Area	10.0	$500	$5,000
4	No. 2 Canyon Yard Area	33.0	$500	$16,500
5	Water Canyon Portals - No. 2 Mine Area	23.0	$500	$11,500
6	Manshaft Substation Area	17.0	$500	$8,500
7	Rail Loop Area	38.0	$500	$19,000
8	Outcrop Fan Area	23.0	$500	$11,500
9	Pole Canyon Area	28.0	$500	$14,000
	TOTALS	285.0		$142,500