

PERMIT CHANGE TRACKING FORM

| | | | |
|--------------------|--------------------------|-----------------|------------------|
| DATE RECEIVED | 9/14/94 | PERMIT NUMBER | ACT/015/025 |
| Title of Proposal: | Bathhouse Waterline | PERMIT CHANGE # | 942 |
| Description: | Dowel Structure Addition | PERMITTEE | Co-Op Mining Co. |
| | | MINE NAME | Bear Canyon Mine |

| | DATE DUE | DATE DONE | RESULT |
|--|----------|-----------|--|
| <input type="checkbox"/> 15 DAY INITIAL RESPONSE TO PERMIT CHANGE APPLICATION | | 10/4 | <input checked="" type="checkbox"/> ACCEPTED <input type="checkbox"/> REJECTED |
| <input type="checkbox"/> Notice of Review Status of proposed permit change sent to the Permittee. | | | Permit Change Classification |
| <input type="checkbox"/> Request additional review copies prior to Division/Other Agency review. | | | <input type="checkbox"/> Significant Permit Revision |
| <input type="checkbox"/> Notice of Approval of Publication. (If change is a Significant Revision.) | | | <input type="checkbox"/> Permit Amendment |
| <input type="checkbox"/> Notice of request to modify proposed permit change prior to approval. | | | <input type="checkbox"/> Incidental Boundary Change |

| REVIEW TRACKING | INITIAL REVIEW | | MODIFIED REVIEW | | FINAL REVIEW AND FINDINGS | |
|---|----------------|------|-----------------|------|---------------------------|------|
| DOGM REVIEWER | DUE | DONE | DUE | DONE | DUE | DONE |
| <input type="checkbox"/> Administrative | | | | | | |
| <input type="checkbox"/> Biology | | | | | | |
| <input checked="" type="checkbox"/> Engineering Jess | 10/14 | | | | | |
| <input type="checkbox"/> Geology | | | | | | |
| <input type="checkbox"/> Soils | | | | | | |
| <input type="checkbox"/> Hydrology | | | | | | |
| <input checked="" type="checkbox"/> Bonding Jess | 10/14 | | | | | |
| <input type="checkbox"/> AVS Check | | | | | | |

| COORDINATED REVIEWS | DUE | DONE | DUE | DONE | DUE | DONE |
|---|-----|------|-----|------|-----|------|
| <input type="checkbox"/> OSMRE | | | | | | |
| <input type="checkbox"/> US Forest Service | | | | | | |
| <input type="checkbox"/> Bureau of Land Management | | | | | | |
| <input type="checkbox"/> US Fish and Wildlife Service | | | | | | |
| <input type="checkbox"/> US National Parks Service | | | | | | |
| <input type="checkbox"/> UT Environmental Quality | | | | | | |
| <input type="checkbox"/> UT Water Resources | | | | | | |
| <input type="checkbox"/> UT Water Rights | | | | | | |
| <input type="checkbox"/> UT Wildlife Resources | | | | | | |
| <input type="checkbox"/> UT State History | | | | | | |
| <input type="checkbox"/> Other | | | | | | |

| | |
|--|--|
| <input type="checkbox"/> Public Notice/Comment/Hearing Complete (If the permit change is a Significant Revision) | <input type="checkbox"/> Permit Change Approval Form signed and approved effective as of this date. <input type="checkbox"/> Permit Change Denied. |
| <input type="checkbox"/> Copies of permit change marked and ready for MRP. | <input type="checkbox"/> Notice of <input type="checkbox"/> Approval <input type="checkbox"/> Denial to Permittee. |
| <input type="checkbox"/> Special Conditions/Stipulations written for approval. | <input type="checkbox"/> Copy of Approved Permit Change to File. |
| <input type="checkbox"/> TA and CHIA modified as required. | <input type="checkbox"/> Copy of Approved Permit Change to Permittee. |
| <input type="checkbox"/> Permit Change Approval Form ready for approval. | <input type="checkbox"/> Copies to Other Agencies and Price Field Office. |

FAX COVER SHEET

94
Please put in
Amendment #2

CO-OP MINING CO.
P.O. Box 1245
Highway 31
Huntington, Utah 84528
(801) 381-2450
Fax (801) 381-5238

From: Charles Reynolds

To: Pamela Limbaugh-Littig

Company: P. O. B. M.

Fax Number: 359-3940

Date: 8/15/94 Time: ~~9:00~~ 3:00

Number of pages:(including cover page) 3

APPLICATION FOR PERMIT CHANGE

Title of Change:
Bathhouse Waterline & Tower Structure
Addition

Permit Number: *ACT 10151025*

Mine: *Beor Canyon Mine*

Permittee: *Co-Op Mining Co*

Description, include reason for change and timing required to implement:

Co-Op proposes to install a waterline to the Bathhouse and an additional Tower Structure near the Tippit Facilities. Also, the proposal includes an update of the company phone number.

- Yes No 1. Change in the size of the Permit Area? _____ acres increase decrease.
- Yes No 2. Change in the size of the Disturbed Area? _____ acres increase decrease.
- Yes No 3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?
- Yes No 4. Will permit change include operations in hydrologic basins other than currently approved?
- Yes No 5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does permit change require or include public notice publication?
- Yes No 7. Permit change as a result of a Violation? Violation # _____
- Yes No 8. Permit change as a result of a Division Order? D.O.# _____
- Yes No 9. Permit change as a result of other laws or regulations? Explain: _____
- Yes No 10. Does permit change require or include ownership, control, right-of-entry, or compliance information?
- Yes No 11. Does the permit change affect the surface landowner or change the post mining land use?
- Yes No 12. Does permit change require or include collection and reporting of any baseline information?
- Yes No 13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 14. Does permit change require or include soil removal, storage or placement?
- Yes No 15. Does permit change require or include vegetation monitoring, removal or revegetation activities?
- Yes No 16. Does permit change require or include construction, modification, or removal of surface facilities?
- Yes No 17. Does permit change require or include water monitoring, sediment or drainage control measures?
- Yes No 18. Does permit change require or include certified designs, maps, or calculations?
- Yes No 19. Does permit change require or include underground design or mine sequence and timing?
- Yes No 20. Does permit change require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?
- Yes No 22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling?
- Yes No 23. Is this permit change coal exploration activity inside outside of the permit area?

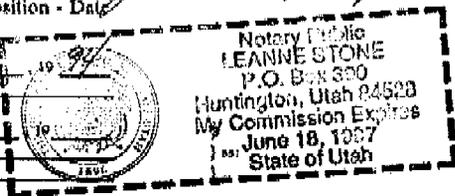
Attach **3** complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Wendell Owen - Per agent 9/15/94
 Signed - Name - Position - Date

Subscribed and sworn to before me this *15* day of *Sept.*
Wendell Owen
 Notary Public

My Commission Expires: _____
 Attest: STATE OF _____
 COUNTY OF _____



Received by Oil, Gas & Mining

ASSIGNED PERMIT CHANGE NUMBER

Review by 10/14

CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528



(801) 381-5238
Coal Sales (801) 381-5777

September 12, 1994

Pamela Grubaugh-Littig
Utah Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

94c

Ms. Grubaugh-Littig,

Copy PAM

Re: Bathhouse Waterline and Tower Structure Addition, Bear Canyon Mine, ACT/015/025, Emery County, Utah

#2 Copy to Amendment file

Enclosed are three DRAFT copies of a proposal for the addition of a culinary waterline connection to the Bathhouse and an additional belt tower structure Northwest of the Tipple Facilities structure. These two structures are being added to the Surface Facilities, and the bond has been updated in the proposal to include the structures.

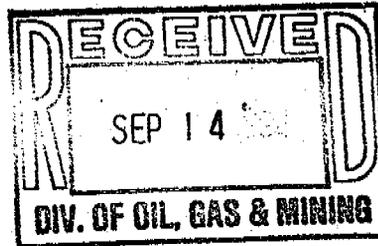
Upon approval, three finalized copies will be submitted to the Division. If you have any questions, please call Charles Reynolds at (801) 687-2450.

Thank You,

Wendell Owen
Wendell Owen,
Resident Agent

Enclosure(s)
cr

*called Charles on 9/14
re: need permit
John S. He will fax info
9/14.*



2.2.5 Resident Agent of the Applicant

Mr. Wendell Owen
Co-Op Mining Co.
P. O. Box 1245
Huntington, Utah 84528
(801) 381-687-2450

2.2.6 Business Designation (Corporation)

Officers and Directors of the Applicant

B. W. Stoddard
P.O. Box 300
Huntington, Utah 84528

J. A. Gustafson
1815 South 1100 West
Woods Cross, Utah 84087

D. J. Sanders
53 West Angelo Ave.
Salt Lake City, Utah 84115

2.2.7 Current, Pending or Previous Coal Mining Permits in the U.S. Held By Applicant and Principal Shareholder Subsequent to 1970

Act/015/021 Utah Division of Oil Gas and Mining
Act/015/025 Utah Division of Oil Gas and Mining

2.2.8 Owners of Record of Surface and Sub-surface Areas Contiguous to the Proposed Permit Area

Plate 2-2 shows surface ownership and Plate 2-3 displays sub-surface ownership for the permit area and parcels of land contiguous to the permit boundaries.

DRAFT

Structures and Conveyors (Including Loadouts)

Below are approx average dimensions used to estimate all conveyors and support towers.

Typical conveyor truss approx 5 ft x 5 ft x 40 ft long sections with angles at corners and bar or angle cross members with 2 ft wide walkway.

Cut trusses into 40 ft lengths for reuse or salvage and load on truck.

Trusses:

Conveyor length = 1,600 ft
Number of cuts = 1,600 ft/40 ft = 40 cuts
For each cut, assume (10)(L4x4x $\frac{1}{2}$)(conservative)
Truss cut length = (10)(8 in)(40 cuts) = 267 ft
(Truss) equivalent cut length for 1 in plate = ($\frac{1}{2}$)(267 ft) = 133.5 ft

Typical conveyor Tower.

(4) 8 in diam. x $\frac{1}{2}$ in pipe x 60 ft high legs (average) spaced 8 ft apart with 6 in diam. x $\frac{1}{2}$ in pipe cross members at approx 45° angle.

Cut towers into 20 ft lengths and load in dumpster.

Towers:

Number of towers = ~~112~~
Cut into 12 pieces/tower
Number of cuts/tower for 8 in pipe = 3 cuts(4 legs) = 12 cuts
Number of cuts/tower for 6 in pipe = 4 cuts(12 cross members) = 48 cuts
Length of cut for each 8 in pipe = pi(8 in) = 2.09 ft
Length of cut for each 6 in pipe = pi(6 in) = 1.57 ft
Tower cut length = (~~112~~ towers)[(12 cuts)(2.09ft)+(48 cuts)(1.57 ft)] = ~~1,104.81,165.0~~ ft
Equivalent cut length for 1 in plate = ($\frac{1}{2}$)(1,104.8 ft) = ~~276.2~~291.2 ft

020-730-0010 (Torch Cutting, 1 in plate)

Equivalent cut length = 133.5 ft + ~~276.2~~ 291.2 ft = ~~409.7~~ 424.7 ft

Cost = (0.923)(2.65/ft)(~~409.7~~ 424.7 ft) = ~~\$1,002.11~~ 1,038.80

Time = ~~409.7~~ 424.7 ft/(95 ft/day) = ~~4.31~~ 4.47 days/4 crews = ~~1.08~~ 1.12 days

Assume each truss section takes 30 min. average and each tower piece 10 min. average to load.

Crane Time = (40 trusses)($\frac{1}{2}$ hr)+(12 pieces)(~~112~~ towers)(0.17 hr) = ~~42.4~~ 4.5 hrs

Labor = (2 men)(~~42.44.5~~ hrs)(\$15.83/hr) ~~\$1,342.38~~ 408.87

Crane + operator = (~~42.44.5~~ hrs)(\$78.25) ~~\$3,317.80~~ 482.13
~~\$4,660.18~~ 891.00

Time = 5.36 days

020-554-5200 (Reinforced Concrete)

Volume = (~~112~~ towers)(4)(3ft)(3ft)(1ft) = ~~396~~ 432 cu ft/27 = ~~14.67~~ 16.0 cu yd

Cost = (0.932)(86.00/cu yd)(~~14.67~~ 16.0 cu yd) = ~~\$1,164.48~~ 282.43

Time = ~~14.67~~ 16.0 cu yd/(25 cu yd/day) = ~~0.59~~ 0.64 days

020-554-5550 (Concrete Disposal on Site)

Volume = ~~14.67~~ 16.0 cu yd

Cost = (0.923)(4.64/cu yd)(~~14.67~~ 16.0 cu yd) = ~~\$62.83~~ 68.52

Time = ~~14.67~~ 16.0 cu yd/(232 cu yd/day) = 0.067 days

Summary of Reclamation Cost Estimate

| | | |
|----|---|--------------------------------------|
| a. | Seal Portals and Backfill | \$ 35,000.00 |
| b. | Removal of Structures | \$ 61,633.85 62,025.00 |
| c. | Soil Placement and Ripping | \$ 76,398.32 |
| d. | Channel Restoration | \$ 51,045.00 |
| e. | Revegetation | \$ 44,119.78 |
| f. | Monitor Well Plugging | \$ 114.32 |
| g. | Maintenance and Monitoring of Subsidence, Vegetation and Erosion (10 yr bond liability Period) | \$ 39,143.20 |
| h. | Hydrology Monitoring (10 yr bond liability period) | \$ 29,630.00 |
| i. | Supervision (20.2 weeks) | \$ 14,285.44 |
| j. | Mobilization and Demobilization | \$ 2,500.00 353,869.91 |
| | | 354,261.06 |
| | 5.1% Reclamation Management Cost | \$ 18,047.37 18,067.31 |
| | 10 pct contingency | \$ 35,386.99 35,426.11 |
| | (1990 dollars) | \$407,304.27 |
| | | 407,754.48 |

| <u>Escalated Values</u> | <u>Escalation Factor</u> |
|-------------------------|--------------------------|
| 1991 - \$412,477412,933 | 1.27% (actual) |
| 1992 - \$421,593422,059 | 2.21% (actual) |
| 1993 - \$432,301432,779 | 2.54% (actual) |
| 1994 - \$440,990441,478 | 2.01% (est) |
| 1995 - \$449,854450,352 | 2.01% (est) |
| 1996 - \$458,896459,404 | 2.01% (est) |
| 1997 - \$468,120468,638 | 2.01% (est) |
| 1998 - \$477,530478,057 | 2.01% (est) |
| 1999 - \$487,128487,666 | 2.01% (est) |

Bond will be posted in accordance with R645-301-820.

Cost Subtotal \$6,889,607,280.75
Time Subtotal 7.0343 days

Building Enclosure for Tank Seam Belt Portal

020-604-0500 (Steel Building, includes disposal)

Volume = (12 ft)(12 ft)(12 ft) = 1,728 cu ft

Cost = (0.923)(0.16/cu ft)(1,728 cu ft) = \$255.19

Time = 1,728 cu ft/(14,800 cu ft/day) = 0.12 days

Cost Subtotal \$255.19

Time Subtotal 0.12 days

Remove Structures Cost Total =

~~\$61,633.85~~

Remove Structures Time Total =

~~62,025.00~~

~~39.18 days~~

~~39.58~~

Cost Subtotal \$6,889.60
Time Subtotal 7.03 days

Building Enclosure for Tank Seam Belt Portal

020-604-0500 (Steel Building, includes disposal)
Volume = (12 ft)(12 ft)(12 ft) = 1,728 cu ft
Cost = (0.923)(0.16/cu ft)(1,728 cu ft) = \$255.19
Time = 1,728 cu ft/(14,800 cu ft/day) = 0.12 days

Cost Subtotal \$255.19
Time Subtotal 0.12 days

Remove Structures Cost Total = \$62,202.90
Remove Structures Time Total = 40.06 days

SUPERSEDED
EFFECTIVE:

NOV 1 1994

UTAH DIVISION OIL, GAS AND MINING

NO LONGER AVAILABLE
RECEIVE:

JUL 22 1994



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)

October 4, 1994

Mr. Wendell Owen
Co-Op Mining Company
P.O. Box 1245
Huntington, UT 84528

Re: Initial Review Response - Accepted, Bathhouse Waterline and Tower Structure Addition, Bear Canyon Mine, Co-Op Mining Company, ACT/015/025-94C, Folder #3, Emery County, Utah

Dear Mr. Owen:

The Division received on September 14,, 1994, the proposed amendment, Bathhouse Waterline and Tower Structure Addition, and has determined the application complete. This amendment has been assigned the permit change number, ACT/0015/025-94C.

We anticipate completion of this review by October 14,1994, at which time you will be notified of the amendment status.

If you have any questions or concerns, please call me.

Sincerely,

A handwritten signature in cursive script, reading "Pamela Grubaugh-Littig".

Pamela Grubaugh-Littig
Permit Supervisor

ALTI



CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528



(801) 381-5238
Coal Sales (801) 381-5777

September 12, 1994

Pamela Grubaugh-Littig
Utah Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

94C

Ms. Grubaugh-Littig,

Copy Pam

Re: Bathhouse Waterline and Tower Structure Addition, Bear Canyon Mine, ACT/015/025, Emery County, Utah

#2 Copy to Amendment file

Enclosed are three DRAFT copies of a proposal for the addition of a culinary waterline connection to the Bathhouse and an additional belt tower structure Northwest of the Tipple Facilities structure. These two structures are being added to the Surface Facilities, and the bond has been updated in the proposal to include the structures.

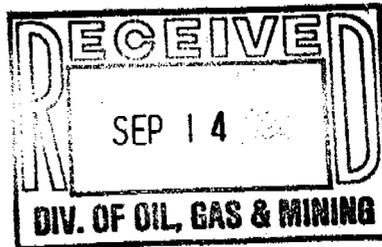
Upon approval, three finalized copies will be submitted to the Division. If you have any questions, please call Charles Reynolds at (801) 687-2450.

Thank You,

Wendell Owen
Wendell Owen,
Resident Agent

Enclosure(s)
cr

*called Charles on 9/14
re: head permit
James. He will fax info
9/14.*



APPLICATION FOR PERMIT CHANGE

Title of Change:

*Bath house Water-line & Tower Structure
Addition*

Permit Number: *ACT 10151025*

Mine: *Bear Canyon Mine*

Permittee: *Co-Op Mining Co.*

Description, include reason for change and timing required to implement:

Co-Op proposes to install a water-line to the Bathhouse and an additional Tower Structure near the Tipple Facilities. Also, the proposal includes an update of the company phone number.

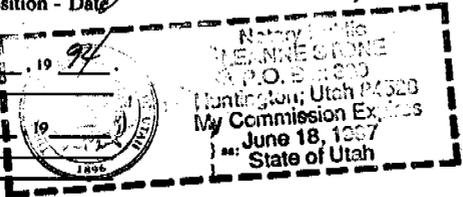
- | | | |
|---|--|--|
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 2. Change in the size of the Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 3. Will permit change include operations outside the Cumulative Hydrologic-Impact Area? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 4. Will permit change include operations in hydrologic basins other than currently approved? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 6. Does permit change require or include public notice publication? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 7. Permit change as a result of a Violation? Violation # _____ |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 8. Permit change as a result of a Division Order? D.O.# _____ |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 9. Permit change as a result of other laws or regulations? Explain: _____ |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | 10. Does permit change require or include ownership, control, right-of-entry, or compliance information? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 11. Does the permit change affect the surface landowner or change the post mining land use? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 12. Does permit change require or include collection and reporting of any baseline information? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 14. Does permit change require or include soil removal, storage or placement? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 15. Does permit change require or include vegetation monitoring, removal or revegetation activities? |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | 16. Does permit change require or include construction, modification, or removal of surface facilities? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 17. Does permit change require or include water monitoring, sediment or drainage control measures? |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | 18. Does permit change require or include certified designs, maps, or calculations? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 19. Does permit change require or include underground design or mine sequence and timing? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 20. Does permit change require or include subsidence control or monitoring? |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | 21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?~ |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling? |
| <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | 23. Is this permit change coal exploration activity <input type="checkbox"/> inside <input type="checkbox"/> outside of the permit area? |

Attach **3** complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Wendell Owen - Reagent 9/15/94
Signed - Name - Position - Date

Subscribed and sworn to before me this 15 day of Sept., 1994.
Wendell Owen
Notary Public
My Commission Expires: _____
Attest: STATE OF _____
COUNTY OF _____



Received by Oil, Gas & Energy

RECEIVED

SEP 19 1994

OIL, GAS & ENERGY

ASSIGNED PERMIT CHANGE NUMBER

2.2.5 Resident Agent of the Applicant

Mr. Wendell Owen
Co-Op Mining Co.
P. O. Box 1245
Huntington, Utah 84528
(801) 381-687-2450

2.2.6 Business Designation (Corporation)

Officers and Directors of the Applicant

B. W. Stoddard
P.O. Box 300
Huntington, Utah 84528

J. A. Gustafson
1815 South 1100 West
Woods Cross, Utah 84087

D. J. Sanders
53 West Angelo Ave.
Salt Lake City, Utah 84115

2.2.7 Current, Pending or Previous Coal Mining Permits in the U.S. Held By Applicant and Principal Shareholder Subsequent to 1970

Act/015/021 Utah Division of Oil Gas and Mining
Act/015/025 Utah Division of Oil Gas and Mining

2.2.8 Owners of Record of Surface and Sub-surface Areas Contiguous to the Proposed Permit Area

Plate 2-2 shows surface ownership and Plate 2-3 displays sub-surface ownership for the permit area and parcels of land contiguous to the permit boundaries.

Structures and Conveyors (Including Loadouts)

Below are approx average dimensions used to estimate all conveyors and support towers.

Typical conveyor truss approx 5 ft x 5 ft x 40 ft long sections with angles at corners and bar or angle cross members with 2 ft wide walkway.

Cut trusses into 40 ft lengths for reuse or salvage and load on truck.

Trusses:

Conveyor length = 1,600 ft
Number of cuts = 1,600 ft/40 ft = 40 cuts
For each cut, assume (10)(L4x4x $\frac{1}{2}$)(conservative)
Truss cut length = (10)(8 in)(40 cuts) = 267 ft
(Truss) equivalent cut length for 1 in plate = ($\frac{1}{4}$)(267 ft) = 133.5 ft

Typical conveyor Tower.

(4) 8 in diam. x $\frac{1}{2}$ in pipe x 60 ft high legs (average) spaced 8 ft apart with 6 in diam. x $\frac{1}{2}$ in pipe cross members at approx 45° angle.

Cut towers into 20 ft lengths and load in dumpster.

Towers:

Number of towers = 112
Cut into 12 pieces/tower
Number of cuts/tower for 8 in pipe = 3 cuts(4 legs) = 12 cuts
Number of cuts/tower for 6 in pipe = 4 cuts(12 cross members) = 48 cuts
Length of cut for each 8 in pipe = pi(8 in) = 2.09 ft
Length of cut for each 6 in pipe = pi(6 in) = 1.57 ft
Tower cut length = (112 towers)[(12 cuts)(2.09ft)+(48 cuts)(1.57 ft)] = 1,104.81,165.0 ft
Equivalent cut length for 1 in plate = ($\frac{1}{4}$)(1,104.8 ft) = 276.2291.2 ft

020-730-0010 (Torch Cutting, 1 in plate)

Equivalent cut length = 133.5 ft + 276.2 ft = 409.7 ft

Cost = (0.923)(2.65/ft)(409.7 ft) = \$1,002.11

Time = 409.7 ft/(95 ft/day) = 4.31 days/4 crews = 1.08 days

Assume each truss section takes 30 min. average and each tower piece 10 min. average to load.

Crane Time = (40 trusses)($\frac{1}{2}$ hr)+(12 pieces)(112 towers)(0.17 hr) = 42.4 hrs

Labor = (2 men)(42.44.5 hrs)(\$15.83/hr) \$1,342.38408.87

Crane + operator = (42.44.5 hrs)(\$78.25) \$3,317.80482.13

\$4,660.18891.00

Time = 5.36 days

020-554-5200 (Reinforced Concrete)

Volume = (112 towers)(4)(3ft)(3ft)(1ft) = 396 cu ft/27 = 14.67 cu yd

Cost = (0.932)(86.00/cu yd)(14.67 cu yd) = \$1,164.48

Time = 14.6716.0 cu yd/(25 cu yd/day) = 0.5964 days

020-554-5550 (Concrete Disposal on Site)

Volume = 14.6716.0 cu yd

Cost = (0.923)(4.64/cu yd)(14.6716.0 cu yd) = \$62.8368.52

Time = 14.6716.0 cu yd/(232 cu yd/day) = 0.067 days

Summary of Reclamation Cost Estimate

| | | |
|----|---|---|
| a. | Seal Portals and Backfill | \$ 35,000.00 |
| b. | Removal of Structures | \$ 61,633.85 62,025.00 |
| c. | Soil Placement and Ripping | \$ 76,398.32 |
| d. | Channel Restoration | \$ 51,045.00 |
| e. | Revegetation | \$ 44,119.78 |
| f. | Monitor Well Plugging | \$ 114.32 |
| g. | Maintenance and Monitoring of Subsidence, Vegetation and Erosion (10 yr bond liability Period) | \$ 39,143.20 |
| h. | Hydrology Monitoring (10 yr bond liability period) | \$ 29,630.00 |
| i. | Supervision (20.2 weeks) | \$ 14,285.44 |
| j. | Mobilization and Demobilization | \$ <u>2,500.00</u> 353,869.91 354,261.06 |
| | 5.1% Reclamation Management Cost | \$ 18,047.37 18,067.31 |
| | 10 pct contingency | \$ <u>35,386.99</u> 35,426.11 |
| | (1990 dollars) | \$407,304.27 <u>407,754.48</u> |

Escalated Values

Escalation Factor

| | | |
|------------------|---------|----------------|
| 1991 - \$412,477 | 12,933 | 1.27% (actual) |
| 1992 - \$421,593 | 422,059 | 2.21% (actual) |
| 1993 - \$432,301 | 432,779 | 2.54% (actual) |
| 1994 - \$440,990 | 441,478 | 2.01% (est) |
| 1995 - \$449,854 | 450,352 | 2.01% (est) |
| 1996 - \$458,896 | 459,404 | 2.01% (est) |
| 1997 - \$468,120 | 468,638 | 2.01% (est) |
| 1998 - \$477,530 | 478,057 | 2.01% (est) |
| 1999 - \$487,128 | 487,656 | 2.01% (est) |

Bond will be posted in accordance with R645-301-820.

Cost Subtotal \$6,889,607,280.75
Time Subtotal 7.0343 days

Building Enclosure for Tank Seam Belt Portal

020-604-0500 (Steel Building, includes disposal)
Volume = (12 ft)(12 ft)(12 ft) = 1,728 cu ft
Cost = (0.923)(0.16/cu ft)(1,728 cu ft) = \$255.19
Time = 1,728 cu ft/(14,800 cu ft/day) = 0.12 days

Cost Subtotal \$255.19
Time Subtotal 0.12 days

Remove Structures Cost Total = \$61,633.85
Remove Structures Time Total = 62,025.00
39.18 days
39.58

2.2.5 Resident Agent of the Applicant

Mr. Wendell Owen
Co-Op Mining Co.
P. O. Box 1245
Huntington, Utah 84528
(801) ~~381687~~-2450

2.2.6 Business Designation (Corporation)

Officers and Directors of the Applicant

B. W. Stoddard
P.O. Box 300
Huntington, Utah 84528

J. A. Gustafson
1815 South 1100 West
Woods Cross, Utah 84087

D. J. Sanders
53 West Angelo Ave.
Salt Lake City, Utah 84115

2.2.7 Current, Pending or Previous Coal Mining Permits in the U.S. Held By Applicant and Principal Shareholder Subsequent to 1970

Act/015/021 Utah Division of Oil Gas and Mining
Act/015/025 Utah Division of Oil Gas and Mining

2.2.8 Owners of Record of Surface and Sub-surface Areas Contiguous to the Proposed Permit Area

Plate 2-2 shows surface ownership and Plate 2-3 displays sub-surface ownership for the permit area and parcels of land contiguous to the permit boundaries.

Structures and Conveyors (Including Loadouts)

Below are approx average dimensions used to estimate all conveyors and support towers.

Typical conveyor truss approx 5 ft x 5 ft x 40 ft long sections with angles at corners and bar or angle cross members with 2 ft wide walkway.

Cut trusses into 40 ft lengths for reuse or salvage and load on truck.

Trusses:

Conveyor length = 1,600 ft
Number of cuts = 1,600 ft/40 ft = 40 cuts
For each cut, assume (10)(L4x4x $\frac{1}{2}$)(conservative)
Truss cut length = (10)(8 in)(40 cuts) = 267 ft
(Truss) equivalent cut length for 1 in plate = ($\frac{1}{4}$)(267 ft) = 133.5 ft

Typical conveyor Tower.

(4) 8 in diam. x $\frac{1}{4}$ in pipe x 60 ft high legs (average) spaced 8 ft apart with 6 in diam. x $\frac{1}{4}$ in pipe cross members at approx 45° angle.

Cut towers into 20 ft lengths and load in dumpster.

Towers:

Number of towers = 112
Cut into 12 pieces/tower
Number of cuts/tower for 8 in pipe = 3 cuts(4 legs) = 12 cuts
Number of cuts/tower for 6 in pipe = 4 cuts(12 cross members) = 48 cuts
Length of cut for each 8 in pipe = pi(8 in) = 2.09 ft
Length of cut for each 6 in pipe = pi(6 in) = 1.57 ft
Tower cut length = (112 towers)[(12 cuts)(2.09ft)+(48 cuts)(1.57 ft)] = 1,104.81,165.0 ft
Equivalent cut length for 1 in plate = ($\frac{1}{4}$)(1,104.8 ft) = 276.2291.2 ft

020-730-0010 (Torch Cutting, 1 in plate)

Equivalent cut length = 133.5 ft + 276.2 ft = 409.7 ft

Cost = (0.923)(2.65/ft)(409.7 ft) = \$1,002.11

Time = 409.7 ft/(95 ft/day) = 4.31 days/4 crews = 1.08 days

Assume each truss section takes 30 min. average and each tower piece 10 min. average to load.

Crane Time = (40 trusses)($\frac{1}{2}$ hr)+(12 pieces)(112 towers)(0.17 hr) = 42.4 hrs

Labor = (2 men)(42.44.5 hrs)(\$15.83/hr) \$1,342.38408.87

Crane + operator = (42.44.5 hrs)(\$78.25) \$3,317.80482.13

\$4,660.18891.00

Time = 5.36 days

020-554-5200 (Reinforced Concrete)

Volume = (112 towers)(4)(3ft)(3ft)(1ft) = 396 cu ft/27 = 14.67 cu yd

Cost = (0.932)(86.00/cu yd)(14.67 cu yd) = \$1,164.48

Time = 14.6716.0 cu yd/(25 cu yd/day) = 0.5964 days

020-554-5550 (Concrete Disposal on Site)

Volume = 14.6716.0 cu yd

Cost = (0.923)(4.64/cu yd)(14.6716.0 cu yd) = \$62.8368.52

Time = 14.6716.0 cu yd/(232 cu yd/day) = 0.067 days

Summary of Reclamation Cost Estimate

| | | |
|----|---|---|
| a. | Seal Portals and Backfill | \$ 35,000.00 |
| b. | Removal of Structures | \$ 61,633.85 62,025.00 |
| c. | Soil Placement and Ripping | \$ 76,398.32 |
| d. | Channel Restoration | \$ 51,045.00 |
| e. | Revegetation | \$ 44,119.78 |
| f. | Monitor Well Plugging | \$ 114.32 |
| g. | Maintenance and Monitoring of Subsidence, Vegetation and Erosion (10 yr bond liability Period) | \$ 39,143.20 |
| h. | Hydrology Monitoring (10 yr bond liability period) | \$ 29,630.00 |
| i. | Supervision (20.2 weeks) | \$ 14,285.44 |
| j. | Mobilization and Demobilization | \$ <u>2,500.00</u> 353,869.91 354,261.06 |
| | 5.1% Reclamation Management Cost | \$ 18,047.37 18,067.31 |
| | 10 pct contingency | \$ 35,386.99 35,426.11 |
| | (1990 dollars) | \$407,304.27 407,754.48 |

| <u>Escalated Values</u> | <u>Escalation Factor</u> |
|-------------------------|--------------------------|
| 1991 - \$412,477412,933 | 1.27% (actual) |
| 1992 - \$421,593422,059 | 2.21% (actual) |
| 1993 - \$432,301432,779 | 2.54% (actual) |
| 1994 - \$440,990441,478 | 2.01% (est) |
| 1995 - \$449,854450,352 | 2.01% (est) |
| 1996 - \$458,896459,404 | 2.01% (est) |
| 1997 - \$468,120468,638 | 2.01% (est) |
| 1998 - \$477,530478,057 | 2.01% (est) |
| 1999 - \$487,128487,656 | 2.01% (est) |

Bond will be posted in accordance with R645-301-820.

Cost Subtotal ~~\$6,889.607,280.75~~
Time Subtotal 7.0343 days

Building Enclosure for Tank Seam Belt Portal

020-604-0500 (Steel Building, includes disposal)
Volume = (12 ft)(12 ft)(12 ft) = 1,728 cu ft
Cost = (0.923)(0.16/cu ft)(1,728 cu ft) = \$255.19
Time = 1,728 cu ft/(14,800 cu ft/day) = 0.12 days

Cost Subtotal \$255.19
Time Subtotal 0.12 days

Remove Structures Cost Total = ~~\$61,633.85~~
~~62,025.00~~
Remove Structures Time Total = ~~39.18 days~~
~~39.58~~

Cost Subtotal ~~\$6,889.607,280.75~~
Time Subtotal 7.0343 days

Building Enclosure for Tank Seam Belt Portal

020-604-0500 (Steel Building, includes disposal)
Volume = (12 ft)(12 ft)(12 ft) = 1,728 cu ft
Cost = (0.923)(0.16/cu ft)(1,728 cu ft) = \$255.19
Time = 1,728 cu ft/(14,800 cu ft/day) = 0.12 days

Cost Subtotal \$255.19
Time Subtotal 0.12 days

Remove Structures Cost Total = ~~\$61,633.85~~
~~62,025.00~~
Remove Structures Time Total = ~~39.18 days~~
~~39.58~~

Structures and Conveyors (Including Loadouts)

Below are approx average dimensions used to estimate all conveyors and support towers.

Typical conveyor truss approx 5 ft x 5 ft x 40 ft long sections with angles at corners and bar or angle cross members with 2 ft wide walkway.

Cut trusses into 40 ft lengths for reuse or salvage and load on truck.

Trusses:

Conveyor length = 1,600 ft
Number of cuts = 1,600 ft/40 ft = 40 cuts
For each cut, assume (10)(L4x4x $\frac{1}{2}$)(conservative)
Truss cut length = (10)(8 in)(40 cuts) = 267 ft
(Truss) equivalent cut length for 1 in plate = ($\frac{1}{4}$)(267 ft) = 133.5 ft

Typical conveyor Tower.

(4) 8 in diam. x $\frac{1}{2}$ in pipe x 60 ft high legs (average) spaced 8 ft apart with 6 in diam. x $\frac{1}{2}$ in pipe cross members at approx 45° angle.

Cut towers into 20 ft lengths and load in dumpster.

Towers:

Number of towers = 112
Cut into 12 pieces/tower
Number of cuts/tower for 8 in pipe = 3 cuts(4 legs) = 12 cuts
Number of cuts/tower for 6 in pipe = 4 cuts(12 cross members) = 48 cuts
Length of cut for each 8 in pipe = pi(8 in) = 2.09 ft
Length of cut for each 6 in pipe = pi(6 in) = 1.57 ft
Tower cut length = (112 towers)[(12 cuts)(2.09ft)+(48 cuts)(1.57 ft)] = 1,104.81,165.0 ft
Equivalent cut length for 1 in plate = ($\frac{1}{4}$)(1,104.8 ft) = 276.2291.2 ft

020-730-0010 (Torch Cutting, 1 in plate)

Equivalent cut length = 133.5 ft + 276.2 ft = 409.7 ft

Cost = (0.923)(2.65/ft)(409.7 ft) = \$1,002.11

Time = 409.7 ft/(95 ft/day) = 4.31 days/4 crews = 1.08 days

Assume each truss section takes 30 min. average and each tower piece 10 min. average to load.

Crane Time = (40 trusses)($\frac{1}{2}$ hr)+(12 pieces)(112 towers)(0.17 hr) = 42.4 hrs

Labor = (2 men)(42.44.5 hrs)(\$15.83/hr) \$1,342.38408.87

Crane + operator = (42.44.5 hrs)(\$78.25) \$3,317.80482.13

\$4,660.18891.00

Time = 5.36 days

020-554-5200 (Reinforced Concrete)

Volume = (112 towers)(4)(3ft)(3ft)(1ft) = 396 cu ft/27 = 14.67 cu yd

Cost = (0.932)(86.00/cu yd)(14.67 cu yd) = \$1,164.48

Time = 14.6716.0 cu yd/(25 cu yd/day) = 0.5964 days

020-554-5550 (Concrete Disposal on Site)

Volume = 14.6716.0 cu yd

Cost = (0.923)(4.64/cu yd)(14.6716.0 cu yd) = \$62.8368.52

Time = 14.6716.0 cu yd/(232 cu yd/day) = 0.067 days

Summary of Reclamation Cost Estimate

| | | |
|----|---|---------------------------------------|
| a. | Seal Portals and Backfill | \$ 35,000.00 |
| b. | Removal of Structures | \$ 61,633.85 62,025.00 |
| c. | Soil Placement and Ripping | \$ 76,398.32 |
| d. | Channel Restoration | \$ 51,045.00 |
| e. | Revegetation | \$ 44,119.78 |
| f. | Monitor Well Plugging | \$ 114.32 |
| g. | Maintenance and Monitoring of Subsidence, Vegetation and Erosion (10 yr bond liability Period) | \$ 39,143.20 |
| h. | Hydrology Monitoring (10 yr bond liability period) | \$ 29,630.00 |
| i. | Supervision (20.2 weeks) | \$ 14,285.44 |
| j. | Mobilization and Demobilization | \$ 2,500.00 353,869.91 |
| | | 354,261.06 |
| | 5.1% Reclamation Management Cost | \$ 18,047.37 18,067.31 |
| | 10 pct contingency | \$ 35,386.99 35,426.11 |
| | (1990 dollars) | \$407,304.27 407,754.48 |

| <u>Escalated Values</u> | <u>Escalation Factor</u> |
|-------------------------|--------------------------|
| 1991 - \$412,477412,933 | 1.27% (actual) |
| 1992 - \$421,593422,059 | 2.21% (actual) |
| 1993 - \$432,301432,779 | 2.54% (actual) |
| 1994 - \$440,990441,478 | 2.01% (est) |
| 1995 - \$449,854450,352 | 2.01% (est) |
| 1996 - \$458,896459,404 | 2.01% (est) |
| 1997 - \$468,120468,638 | 2.01% (est) |
| 1998 - \$477,530478,057 | 2.01% (est) |
| 1999 - \$487,128487,656 | 2.01% (est) |

Bond will be posted in accordance with R645-301-820.

2.2.5 Resident Agent of the Applicant

Mr. Wendell Owen
Co-Op Mining Co.
P. O. Box 1245
Huntington, Utah 84528
(801) ~~381687~~-2450

2.2.6 Business Designation (Corporation)

Officers and Directors of the Applicant

B. W. Stoddard
P.O. Box 300
Huntington, Utah 84528

J. A. Gustafson
1815 South 1100 West
Woods Cross, Utah 84087

D. J. Sanders
53 West Angelo Ave.
Salt Lake City, Utah 84115

2.2.7 Current, Pending or Previous Coal Mining Permits in the U.S. Held By Applicant and Principal Shareholder Subsequent to 1970

Act/015/021 Utah Division of Oil Gas and Mining
Act/015/025 Utah Division of Oil Gas and Mining

2.2.8 Owners of Record of Surface and Sub-surface Areas Contiguous to the Proposed Permit Area

Plate 2-2 shows surface ownership and Plate 2-3 displays sub-surface ownership for the permit area and parcels of land contiguous to the permit boundaries.