

**3.3.2 Portals**

Bear Canyon Mine complex has ~~thirteen~~ seven existing portals, and ~~seven~~ one proposed portals.

The Blind Canyon Seam (Plate 3-4A) has two fan, one belt, and two intake portals. The first fan portal is in Bear canyon near the upper storage pad and the second is in Blind Canyon. The belt portal pad is shown on Plate 3-6. One intake portal is located in the main portal area, and one in Blind Canyon (Appendix 3-I). Three accidental breakouts also exist in Blind Canyon, making a total of 5 openings in the Blind Canyon Seam on the Blind Canyon side. ~~These will be~~ Four of these have been reclaimed in the ~~same~~ same manner described in ~~as the other portals~~ (Appendix 3-I). The remaining two have been permanently sealed and will be backfilled during final reclamation. There are two portals in the Hiawatha Seam (Plate 3-4B): a belt and an intake portal. Permanent Seals have been placed over these portals backfilling will take place during final reclamation. Mining from this Hiawatha seam is not anticipated until 2007. ~~Until that time, these two portals will be temporarily sealed using a block seal as described in Section 3.6.10.1.~~

The Bear Canyon #2 Mine, has three portals (Plate 3-4C), that have been reclaimed ~~all located in Bear Canyon.~~

The Bear Canyon #3 and #4 mines, proposed for Wild Horse Ridge, will have a total of ~~seven~~ six portals (Plate 3-4A and 3-4C), all located in Bear Canyon. ~~The actual location of the #4 Mine portals will not be known until development begins in the #3 Mine and underground drilling can be accomplished, since the Tank Seam does not outcrop to indicate the best access location. No mining will occur in the Tank Seam until an amendment is submitted to the Division to permit surface access. The reserve and permit information has been included for the requirements of the Resource Recovery and Protection Plan.~~

A summary of the portals are as follows:

	Existing	Proposed
Blind Canyon Seam – Bear Canyon	3	1
- Blind Canyon	<del>5</del>	
Hiawatha Seam -	2	
Tank Seam -	<u>3</u>	<u><del>3</del> 1</u>
Total	<del>13</del> <u>8</u>	<del>4</del> <u>1</u>

Mine # C/015/0025  
 File Incoming  
 Record # 0054  
 Doc. Date 10.04.05  
 Recd. Date 10.05.05

Summary of Reclamation Cost Estimate

Direct Costs

a.	Seal Portals and Backfill	\$ <del>250,000</del> <u>112,500</u>
b.	Removal of Structures	\$ 210,403
c.	Soil Placement and Ripping	\$ 178,617
d.	Channel Restoration	\$ 403,728
e.	Revegetation	\$ 462,968
f.	Monitoring Well Plugging	\$ <u>5,000</u>
Total Direct Costs:		\$ <del>1,510,716</del> <u>1,373,216</u>

Indirect Costs

g.	Maintenance and Monitoring (10%)	\$ <del>151,072</del> <u>137,322</u>
h.	Contingency (5%)	\$ <del>75,536</del> <u>68,661</u>
i.	Engineering Redesign (2.5%)	\$ <del>37,768</del> <u>34,330</u>
j.	Mobilization and Demobilization (5%)	\$ <del>75,536</del> <u>68,661</u>
k.	Contract Management Fee (2.5%)	\$ <del>37,768</del> <u>34,330</u>
Total Indirect Costs:		\$ <del>377,680</del> <u>343,304</u>

Total Reclamation Cost (2001 dollars) **\$~~1,888,396~~ 1,716,520**

Escalated Values		Escalation Factor
2002 - <del>1,947,313</del> <u>1,770,075</u>		3.12% (est)
2003 - <del>2,008,070</del> <u>1,825,302</u>		3.12% (est)
2004 - <del>2,070,722</del> <u>1,882,251</u>		3.12% (est)
2005 - <del>2,135,328</del> <u>1,940,978</u>		3.12% (est)

The total bond currently posted, rounded to the nearest \$1,000 is **\$1,825,000**

**Reclamation Costs**

**a. Seal and Backfill Portals**

AMR Costs- \$12,500/seal including backfill x ~~20~~ 9 seals     ~~250,000~~ 112,500

**b. Removal of Structures**

All estimates with 10 digit numbers are from 2001 Means Site Work cost Data. Most of the steel and equipment will be salvaged for scrap or reuse. M&P Enterprises in Huntington, Utah, will pick up and pay \$40.00/ton for scrap iron & equipment if placed in 30 cu yd (8ft wide x 20 ft long x 5 ft high) dumpsters or loaded with crane on their trucks. Reclamation costs assume the steel will be picked up on site, but the mine receives no payment for the steel. D&R Salvage in Castle Dale will accept the steel without a dump fee. Therefore no dump fee is included for steel. Means cost data includes disposal to 20 miles, which is the approximate distance to the Nielson Construction landfill in Emery County. Dump fee for Nielson Construction landfill is \$7.00 typically.

**Sales-Receiving-Scale House Complex**

02220-100-0100 ( Mixture type Building, includes disposal)

Volume = (34 ft) (83 ft) (16 ft) = 45,152 cu ft

Cost = (\$ 0.24 /cu ft) (45,152 cu ft) = \$ 10,837

Dump Fee = ((45,152 cu ft)/27)\*0.3 rubble volume\*1.35 tons/cy) (\$7.00/ton) = \$4,741

Time = (45,152 cu ft) / ( 20,100 cu ft/day) = 2.25 days

**Concrete Demolition**

Total Footing Volume =(0.67 ft)(2 ft)(234 ft) = (313.6 cu ft) / 27 = 11.6 cu yds

Total Foundation Volume = (0.67 ft)(4 ft)(234 ft) = (627.1 cu ft) / 27 = 23.2 cu yds

Floor Volume = (83 ft)(34 ft)(0.33 ft) = (931.3 cu ft) / 27 = 34.5 cu yds

Total Volume = 69.3 cu. yds

Cost = (69.3 CY) ( \$12.78/CY) = \$886

Time = (234L.F.)/(300L.F./day)+(234ft)(4ft)/(140s.f./day)+(83ft)(34ft)/(500sf/day) = 13.10 days

02220-875-5550 (Concrete Disposal on Site) 002315-400-1300 (3 CY loader) 02320-200-0320 (16 ton truck)

Cost = (\$10.69/cu. yd.) (69.3 cu yds) (1.3 swell factor) = \$963

Time = 90.1 cu. yds. / (232 cu. yds./day) = 0.40 days

Cost Subtotal                    \$17,427

Time Subtotal                    15.75 days