**EXISTING STRUCTURES**

Table 5A-1 lists each structure and construction dates. Reclamation is expected in 2012.

Table 5A-1 Existing Structures

| Existing Structure | Construction Dates Starting | Completion | Photo # |
|---|---|---|---|
| Sales/Receiving/Scale Office/Caretaker Dwelling | 6/84 | 10/87 | 1 |
| Fuel Tanks | 10/83 | 6/84 | 2 |
| Truck Loading Facility | 9/82 | 4/83 | 3 |
| Oil Slack Loading Facility | 4/83 | 7/83 | 3 |
| Storage & Stacking Facility | 6/80 | 4/84 | 3 |
| Conveyor Structures | 3/80 | 6/80 | 3 |
| ~~Added~~ Machine Shop | 11/89 | 12/89 | 5 |
| Shop | 10/83 | 9/84 | 4 |
| Coal Processing Facility | 4/80 | 12/85 | 6 |
| Lump Coal Facility | 10/83 | 12/85 | 6 |
| Non-Coal Storage Yard | 3/80 | 9/84 | 7 |
| ~~Transformer Sub-Station~~ | ~~4/80~~ | ~~6/80~~ | ~~8~~ |
| ~~Cross Conveyor~~ | ~~7/89~~ | ~~9/89~~ | ~~9~~ |
| WHR Tank Seam Fan | 7/4/01~~proposed~~ | 12/31/05 | 10 |
| ~~Coal Storage Bin~~ | ~~4/87~~ | ~~10/87~~ | ~~11~~ |
| Powder Magazine | 9/82 | containerized | 14 |
| Water Tanks & System | 8/82 | 11/82 | 13 |
| ~~Mine Fan~~ | ~~9/82~~ | ~~11/82~~ | ~~14~~ |
| Lump Coal Storage Pad | 8/92 | 10/92 | 15 |
| Equipment Wash Pad | 8/92 | 10/92 | 16 |
| Shower House | 5/93 | 7/94 | 17 |
| Antifreeze Storage Tank | 12/93 | 1/94 | 18 |
| WHR Blind Canyon Seam Fan | 7/4/01 | 12/31/05 | 19 |
| Wild Horse Ridge Conveyor Belt | 7/4/01 | 12/31/05 | 9 |
| WHR Substation | 7/4/01 | 12/31/05 | 12 |
| ~~WHR Retaining Wall~~ | ~~7/4/01~~ | ~~12/31/05~~ | |
| WHR ~~Water &~~ Fuel Tanks | 7/4/01 | 12/31/05 | 20 |
| WHR Coal Storage Bin | 7/4/01 | 12/31/05 | |
| Power Lines | 7/4/01 | 12/31/05 | |
| Water Lines | 7/4/01 | 12/31/05 | |
| ~~Portable Fan~~ | ~~7/4/01~~ | ~~12/31/05~~ | ~~21~~ |
| Fuel Containment Enclosure | 7/4/01 | 12/31/05 | |
| ~~Tank Seam Borehole Structure~~ | ~~7/4/01~~ | ~~12/31/05~~ | ~~20~~ |
| Mine Portals | - | - | - |

11. Transformer Substation. ~~This facility supplies electrical power to both surface and underground facilities. A fence is maintained around the structure, and the area complies with MSHA health and safety standards~~. This structure has been reclaimed See Photo #8.

~~Cross Conveyor. This belt conveys the coal from the Blind Canyon Seam to the coal storage bin. See Photo #9.12.~~

12~~13~~. WHR Tank Seam Fan. The Wild Horse Ridge Tank Seam Fan (Shown in Photo #10) was the old Blind Canyon Fan and is MSHA approved. All safety guards are maintained and in place.

13~~14~~. Coal Storage Bin. ~~This structure consists of a 20 ft X 20 ft surge bin to receive~~

14~~15~~. Powder/Cap Magazines. This structure consists of a fire proof storage housing. See Photo . These structures comply with all requirements for Type 2 magazines as described in Sec. 1102, United States Code, Chapter 40, Subpart K - Storage, Section 55.208.

15~~16~~. Water Tanks. These surge tanks are a part of the culinary water supply system. See Photo #13.

~~17. Mine Fan. The mine ventilation fans include the Bear Canyon Fan (shown in Photo #14). The fan is MSHA approved, and all safety guards are maintained in place.~~

16~~18~~. Lump Coal Storage Pad. This structure consists of a concrete pad and concrete retaining walls. See Photo #15.

17~~19~~. Equipment Wash Pad. This structure consists of a concrete pad with a grease and oil trap. The grease and oil trap will be cleaned quarterly to prevent material buil-up. Material will be disposed of in the Emery County approved landfill. See photo #16.

18~~20~~. Shower House. This structure consists of a two story masonry block building that houses employee showers, training classrooms and offices. See Photo #17. The waste disposal system is discussed in Appendix 5-N.

19~~21~~. Antifreeze Storage Tank. This consists of 2,000 gal storage tank. Antifreeze solution is used to spray truck hoppers during periods of cold weather to prevent coal from freezing in transit. The tank is enclosed by a metal structure to hold the entire tank capacity in the event of a spillage. See photo #18.

20~~22~~. WHR Blind Canyon Seam Fan. The WHR Blind Canyon Seam Ventilation Fan came from the old Tank Seam mine and is MSHA approved, and all safety guards are maintained in place. See photo #19.

21~~23~~. Wild Horse Ridge Conveyor Belt. This structure transports coal from the Bear Canyon No. 3 Mine to the tipple facilities.

22~~24~~. WHR Substation. This facility supplies electrical power to the surface and underground facilities operating in Wild Horse Ridge.

~~25. WHR Retaining Wall. The wall is 30 feet tall and 300 feet long and was installed to allow for the widening of the upper Tank Seam access road.~~

23~~26.~~ WHR ~~Water and~~ Fuel Tanks. These tanks are used to store ~~water and~~ diesel fuel. ~~The water is used for mining operations in the Bear Canyon No. 3 Mine~~. The fuel tank is used to refuel diesel equipment used in the operation of the No. 3 Mine. ~~The water tank came from the old T.S. mine.~~

24~~27.~~ WHR Coal Storage Bin. This structure is used for coal surge capacity from the Bear Canyon No. 3 and 4 Mines. It consists of a metal storage silo approximately 30' diameter.

2528. Power Lines. Power is supplied to the mine facilities through high voltage power lines. The line pole locations are shown on Plates 5-2A through 5-2G.

2629. Water Lines. Water is supplied to the mine facilities with the use of a piping network. Water lines are shown on Plates 7-1A through 7-1G.

~~30. Portable Fan. This fan was added to the Bear Canyon #1 Mine to act as an auxiliary fan to the Bear Canyon #1 Mine Fan.~~

2731. Fuel Containment Enclosure. This structure is designed to contain material from the storage tanks if they should rupture. There are three tanks located within the enclosure, two 11,500 gal tanks and one 17,500 gal. The enclosure will consist of the base and 5 walls each 2'6" high enclosing an area of 1,500 $ft^2$. The structure will hold over 22,000 gal. Calculations are shown below.

$V_{req}$ = 17,500 gal. * 1.1 = 19,250 gal = 2,600 $ft^3$

Enclosed Area = 1624 $ft^2$.

11,500 gal. Tank area = p* (7 ft)$^2$ = 155 $ft^2$

Containment Area = 1624 – (2*155) = 1,314 $ft^2$.

Wall height = 2,600$ft^3$ 1,314 $ft^2$ = 2 feet + 4 inches freeboard

Actual wall height = 2 feet 4 inches.

Spill material will be drained out the bottom through a pipe with a locking valve and transported and disposed of in accordance with all state and federal

regulations. The enclosure will be checked weekly and drained of standing water if needed. Details of the design, maintenance, and spill disposal can be found in the C.W. Mining SPCC plan.

~~32. Tank Seam Borehole Structure. This metal structure fully encloses the borehole and conveyor, which conveys coal from the Tank Seam Mine to the Blind Canyon Seam Mine. See photo #20.~~

28~~33~~. Portals. ~~Bear Canyon Mine Complex has seven existing portals, and one proposed Portal. The Blind Canyon Seam (Plate 3-4A) has two fans, one belt, and two intake portals. The first fan portal is in Bear Canyon near the upper storage pad and the second is in the 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. Four of these have been reclaimed in the manner described in (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 and intake portal. Permanent seals have been places over there portals backfilling will take place during final reclamation.~~

~~The bear canyon #2 mine, has three portals (Plate 3-4C), that have been reclaimed.~~

The Bear Canyon #3 and #4 Mines, in Wild Horse Ridge, will have a total of six portals (Plate 3-4A and 3-4C), all located in Bear Canyon.

A Summary of the Portals are as follows:

| | | Existing | ~~Proposed~~ |
|---|---|---|---|
| Blind Canyon Seam | ~~- Bear Canyon~~ | 3~~4~~ | |
| | ~~- Blind Canyon~~ | | |
| ~~Hiawatha Seam~~ | ~~-~~ | ~~2~~ | |
| Tank Seam | - | 3 | |
| | Total | 6~~9~~ | |


Photo #9 ~~Cross~~ Wild Horse Ridge Conveyor Belt

Photo #10  WHR Tank Seam Fan

This structure has been reclaimed.
Photo #11  Coal Storage Bin

Photo #12 WHR Substation

Photo #19 WHR Blind Canyon Seam Fan

Photo #20 WHR Coal Storage Bin ~~Tank Seam Borehole Structure~~