

0018



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

INSPECTION REPORT

Norman H. Bangertor
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

Partial: ___ Complete: X Exploration: ___

Inspection Date & Time: March 23 & 24, 1993 /12:00 pm - 5:00 pm; 8:20 am - 1:30 pm

Date of Last Inspection: February 25, 1993

Mine Name: Cottonwood/Wilberg County: Emery Permit Number: ACT/015/019

Permittee and/or Operator's Name: PacifiCorp

Business Address: P.O. Box 1005, Huntington, Utah 84528

Type of Mining Activity: Underground X Surface ___ Prep. Plant ___ Other ___

State Official(s): Ken Wyatt

Company Official(s): Jerry Pollack, Karl Housekeeper

Federal Official(s): None

Weather Conditions: Clear and warm, 60's

Existing Acreage: Permitted-11,532 Disturbed-102 Regraded-___ Seeded-___ Bonded-102

Increased/Decreased: Permitted-___ Disturbed-___ Regraded-___ Seeded-___ Bonded-___

Status: Exploration/ X Active/ ___ Inactive/ ___ Temporary Cessation/ ___ Bond Forfeiture

Reclamation (Phase I/ ___ Phase II/ ___ Final Bond Release/ ___ Liability Year)

REVIEW OF PERMIT, PERFORMANCE STANDARDS & PERMIT CONDITION REQUIREMENTS

Instructions

- Substantiate the elements on this inspection by checking the appropriate performance standard.
 - For complete inspections provide narrative justification for any elements not fully inspected unless element is not appropriate to the site, in which case check N/A.
 - For partial inspections check only the elements evaluated.
- Document any noncompliance situation by referencing the NOV issued at the appropriate performance standard listed below.
- Reference any narratives written in conjunction with this inspection at the appropriate performance standard listed below.
- Provide a brief status report for all pending enforcement actions, permit conditions, Division Orders, and amendments.

	EVALUATED	N/A	COMMENTS	NOV/ENF
1. PERMITS, CHANGE, TRANSFER, RENEWAL, SALE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. SIGNS AND MARKERS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. TOPSOIL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. HYDROLOGIC BALANCE:				
a. DIVERSIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. SEDIMENT PONDS AND IMPOUNDMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. OTHER SEDIMENT CONTROL MEASURES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. WATER MONITORING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. EFFLUENT LIMITATIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. EXPLOSIVES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. DISPOSAL OF EXCESS SPOIL/FILLS/BENCHES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. NONCOAL WASTE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. PROTECTION OF FISH, WILDLIFE AND RELATED ENVIRONMENTAL VALUES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. SLIDES AND OTHER DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. CONTEMPORANEOUS RECLAMATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. BACKFILLING AND GRADING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. REVEGETATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. SUBSIDENCE CONTROL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. CESSATION OF OPERATIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. ROADS:				
a. CONSTRUCTION/MAINTENANCE/SURFACING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. DRAINAGE CONTROLS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. OTHER TRANSPORTATION FACILITIES	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. SUPPORT FACILITIES/UTILITY INSTALLATIONS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. AVS CHECK (4th Quarter-April, May, June) _____ (date)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. AIR QUALITY PERMIT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
21. BONDING & INSURANCE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

INSPECTION REPORT

(Continuation sheet)

Page 2 of 7

PERMIT NUMBER: ACT/015/019

DATE OF INSPECTION: March 23 - 24, 1993

(Comments are Numbered to Correspond with Topics Listed Above)

1. **PERMITS, CHANGE, TRANSFER, RENEWAL, SALE**

The following permits and approvals were examined at the mine office near Huntington, Utah:

The mining permit from DOGM was issued to PacifiCorp on July 6, 1989 and was signed on July 25, 1989 by J. Brett Harvey.

A State Lands and Forestry, Right of Way, number 2470 was issued by Ralph Miles on December 21, 1982 for the haul road from the Wilberg road to the Deseret Mine.

A Bureau of Land Management (BLM) Right of Way (ROW), number U-38044 was issued on August 31, 1977 for the haul road to the mine. This permit expires on August 30, 2007.

A BLM ROW number U-37641 was issued August 31, 1977 for installation of the sewer line and leachfield. This permit expires on August 30, 2007.

A BLM ROW number U-37642 was issued August 31, 1977 for construction of the waste rock site east of U-57. This permit expires on August 30, 2007.

A BLM ROW number U-38063 was issued August 8, 1977 for construction of a 69 KV powerline.

A US Forest Service Special Use Permit was issued on February 16, 1978 for construction of the mine sediment ponds.

2. **SIGNS AND MARKERS**

Perimeter markers, topsoil signs, and mine identification signs were observed in place and contained the appropriate information.

3. **TOPSOIL**

The topsoil and sub-soil stockpiles at the new waste rock site were still partially snow covered. The warm temperatures were melting the snow rapidly. A small area along the north aspect of the topsoil pile had sloughed. It looked as if the snow slid and pulled the surface of the topsoil pile. Tension cracks were observed along the crest of both the topsoil and sub-soil stockpiles. We discussed monitoring these cracks for further movement using stakes. The area that sloughed was about 30 - 40 feet wide and less than a foot deep. Some of the better established vegetation was observed still in place in the slide area. The operator committed to re-seed this area this spring while it is still moist.

INSPECTION REPORT

(Continuation sheet)

Page 3 of 7

PERMIT NUMBER: ACT/015/019

DATE OF INSPECTION: March 23 - 24, 1993

(Comments are Numbered to Correspond with Topics Listed Above)

4a. **HYDROLOGIC BALANCE: DIVERSIONS:**

All undisturbed diversions within the mine area were in good repair. The inlets to the main undisturbed culvert in Grimes Wash and the Right Fork of Grimes Wash were clear and unobstructed. Some flow (approx 10 gpm) was observed in the Right Fork of Grimes Wash. Some sloughed material was observed in the diversion on the east side of the lower material storage pad. This should be cleaned this spring as weather permits.

The diversions around the west side of the waste rock site was silted in. This should be cleaned as soon as the area is dry enough for equipment to access.

4b. **HYDROLOGIC BALANCE: SEDIMENT PONDS AND IMPOUNDMENTS**

The as-builts for the mine's sediment ponds were certified on June 1, 1989, by Larry Guymon. The 1992 4th quarter pond inspections were done on December 16, 1992, by Guy Davis and Jerry Pollack. The following information was reported.

<u>POND</u>	<u>WATER LEVEL</u>	<u>SED. VOLUME</u>	<u>SED. CAPACITY</u>
North pond	7356 (ice)	.11 acre feet	.90 acre feet
South pond	7330.3 (ice)	0.0 acre feet	.30 acre feet
Waste Rock	6754.8 (ice)	0.0 acre feet	1.75 acre feet

4c. **HYDROLOGIC BALANCE: OTHER SEDIMENT CONTROL MEASURES**

The silt fences associated with the Cottonwood fan were still covered with snow. Silt fencing around the waste rock site was intact. Several areas were observed where snow had stressed the fabric and pulled it down the supports. They were still functioning as designed. As spring progresses and the areas dry out the operator should continue to pick up trash and debris that has been buried in snow.

4d. **HYDROLOGIC BALANCE: WATER MONITORING**

Water monitoring data were examined for the 4th quarter 1992. Water discharged from the Cottonwood Mine has averaged monthly flows as follows.

<u>MONTH</u>	<u>AVERAGE DISCHARGE (Gallons/Day)</u>
Aug. 1992	1,435,584
Sept. 1992	2,297,987
Oct. 1992	1,423,935
Nov. 1992	1,552,140
Dec. 1992	1,523,808
Jan. 1993	1,456,409

INSPECTION REPORT

(Continuation sheet)

Page 4 of 7

PERMIT NUMBER: ACT/015/019

DATE OF INSPECTION: March 23 - 24, 1993

(Comments are Numbered to Correspond with Topics Listed Above)

4d. **HYDROLOGIC BALANCE: WATER MONITORING** (Continued)

The Miller Canyon breakouts have discharged as follows.

<u>MONTH</u>	<u>AVERAGE DISCHARGE (Gallons/Day)</u>
June 1992	18,000
Jul. 1992	24,480
Aug. 1992	23,760
Sept. 1992	24,000
Oct. 1992	31,680
Nov. 1992	30,240
Dec. 1992	14,400

4e. **HYDROLOGIC BALANCE: EFFLUENT LIMITATIONS**

Discharges from the mine operations are covered under UPDES permit number Ut-0022986. This permit was issued on November 12, 1992 and expires on October 31, 1997. The permit conditions that the mine not use Gypsum for rock dust. The permit lists 5 discharge points as listed below.

<u>POINT</u>	<u>LOCATION</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>
001	Mine discharge to Grimes Wash	39° 19' 4"	111° 7' 20"
002	Sediment ponds to Cottonwood Ck.	39° 18' 56"	111° 11' 15"
003	Mine sediment pond to Grimes Wash	39° 19' 7"	111° 7' 13"
004	Miller Canyon portal to Cottonwood Ck.	39° 18' 43"	111° 10' 35"
005	Waste rock sediment pond	39° 17' 43"	111° 7' 18"

Discharge monitoring data from the 4th quarter 1992. TDS limitations are set at 1,000 pounds/day for discharge point 001 and 004. The remaining discharge points have a TDS limitation of 2,000 pounds/day. No discharges exceeded the TDS limitations, however the discharge from the mine's sediment ponds into Grimes Wash in January was 1926 pounds/day.

7. **COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS**

The 4th quarter 1992 engineering inspection for the waste rock site was conducted on December 15, 1992. The report was signed by Blake Webster on December 17, 1992. The report indicated that sediment from last years pond cleaning was still in place and drying. Minor settlement cracks were reported on the inslope side of the topsoil stockpile. The waste rock area sediment pond was less than 5 percent full and no seeps were observed.

INSPECTION REPORT

(Continuation sheet)

Page 5 of 7

PERMIT NUMBER: ACT/015/019

DATE OF INSPECTION: March 23 - 24, 1993

(Comments are Numbered to Correspond with Topics Listed Above)

7. **COAL MINE WASTE/REFUSE PILES/IMPOUNDMENTS** (Continued)

PacifiCorp is planning to clean the north sediment pond this spring. Approval was given for the operator to haul sediment to the active waste rock disposal area. Since last years sediment is still drying a new area on the south west portion of the waste rock site will be used to place new sediment. This will allow placement of sediment no deeper than about three feet which will facilitate drying.

8. **NONCOAL WASTE**

Noncoal waste was observed in a dumpster on the upper material storage pad. This waste is periodically hauled to the landfill for final disposal.

10. **SLIDES AND OTHER DAMAGE**

See discussion of the topsoil stockpile under TOPSOIL above.

11. **CONTEMPORANEOUS RECLAMATION**

The last cell of the original waste rock site is about filled. This area will be completed this year with the final waste rock lift. Regrading and topsoil placement followed by seeding and mulching should complete this phase of the original waste rock.

12. **BACKFILLING AND GRADING**

The waste rock material disposed of at the new waste rock site is in need of grading and compaction. This work will be done as the site dries out and the area is prepared for the upcoming pond cleaning.

13. **REVEGETATION**

The slopes of the topsoil and subsoil stockpiles do have good vegetation on them. On the surface of the subsoil stockpile, the pocks have almost silted in resulting in the potential for water to run down slopes which could cause erosion. The operator should consider roughening the top of the stockpile to retain runoff from flowing off of the top and down the sides. This would reduce the erosion potential. Revegetation of the original waste rock site will probably be completed this year.

14. **SUBSIDENCE CONTROL**

The 1991 subsidence report was submitted to DOGM in May 1992. The 1992 subsidence report was still being prepared by Roger Fry in the Salt Lake City office. This report will probably be submitted by the end of March 1993.

INSPECTION REPORT

(Continuation sheet)

Page 6 of 7

PERMIT NUMBER: ACT/015/019

DATE OF INSPECTION: March 23 - 24, 1993

(Comments are Numbered to Correspond with Topics Listed Above)

16b. **ROADS: DRAINAGE CONTROLS**

The drainage from the mine access road in the vicinity of the sediment ponds causes continual maintenance requirements by filling in the strawbale checkdam adjacent to the stop sign and the silt fence/catch basin off of the side of the road. We discussed the option to remove the stawbales and construct a larger catch basin structure. This would benefit the mine by eliminating the frequent need to clean the inaccessible catch basin off of the side of the road which requires special equipment be brought to the site and allow the operator to access and clean the larger catch basin adjacent to the stop sign with equipment from the mine.

Additional measures to alleviate these continual maintenance problems would be to construct small asphalt berms along the side of the access road to aid in channeling water into the drop inlets that drain to the sediment pond. The above measures should be seriously considered by the operator.

20. **AIR QUALITY PERMIT**

The operator (Karl Houskeeper and Guy Davis) were out of the office during this inspection to be re-certified by the Division of Air Quality for opacity re-certification.

21. **BONDING & INSURANCE**

Insurance for the Cottonwood/Wilberg Mine is current. A policy, number X0296A193, through Associated Electric and Gas Insurance Services Limited was examined. This policy is effective from February 24, 1993 through February 24, 1994 in the amounts of \$35 million aggregate and \$1 million for each occurrence. The Division was listed as the certificate holder.

The reclamation bond for \$2,071,098 in 1994 dollars was received by the Division on December 7, 1990 and covers 101.74 acres of disturbance. The acreage breakdown was described as follows:

<u>MINE AREA</u>	<u>ACREAGE</u>	<u>LAND OWNER</u>
Mine complex	20.0 acres	USFS
Waste rock site	48.62 acres	BLM
Waste Rock site	24.42 acres	BLM
Sewer Leachfield	3.7 acres	BLM
Cottonwood Fan Portal	<u>5.0 acres</u>	Private
TOTAL ACREAGE:	101.74 acres	

INSPECTION REPORT

(Continuation sheet)

Page 7 of 7

PERMIT NUMBER: ACT/015/019

DATE OF INSPECTION: March 23 - 24, 1993

Copy of this Report:

Mailed to: Bernie Freeman (OSM), Guy Davis (PacifiCorp)

Given to: Joe Helfrich (DOGM)

Inspector's Signature: _____

Ken Wyatt

7 Date: March 31, 1993