

mfc

3482
SL-070645
U-02292
(U-065)Moab District
P.O. Box 970
Moab, Utah 84532

FEB 28 1991

Pamela Grubaugh-Littig, Permit Supervisor
State of Utah
Division of Oil, Gas and Mining
355 West North Temple Street
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Ms. Grubaugh-Littig:

On February 21, 1990, the Bureau of Land Management (BLM) received PacifiCorp's proposed Rilda Canyon Lease Tract addition for the Deer Creek Mine Permit Application Package (PAP). The BLM was asked to review the resource recovery and protection plan (R2P2) and submit our findings which are discussed below.

PacifiCorp plans to enlarge the Deer Creek Mine Permit Area (Act/015/018) by adding an adjacent tract to the north. The tract includes one State of Utah coal lease (ML-22509), three Federal coal leases (U-7653, U-47977, and SL-050862) and the southern portion of Federal coal lease U-06039.

The R2P2 calls for the development of main entries in a north-northwest direction beyond the Roan's Canyon Fault. Longwall panels are projected on both sides of these main entries. A number of longwall panels located along the south side of Rilda Canyon will undermine portions of the canyon escarpments (see enclosed highlighted map). This has prompted an in-depth review of potential escarpment failure.

The Manti-LaSal National Forest (FS) has asked BLM to evaluate the R2P2 and determine if the mining plan provides adequate protection of surface resources in accordance with the Federal lease terms and conditions. The BLM is currently working on a response to the FS regarding our analysis of the escarpment issue. Final approval of mining zones that may affect sensitive escarpment areas is contingent on the completion of the technical studies currently underway. Because the mine plan provides adequate flexibility for any necessary future adjustments in these areas, development as proposed for the remainder of the R2P2 is recommended for approval.

We have determined that the R2P2 as submitted is complete and technically adequate. The R2P2 is also in compliance with the Mineral Leasing Act, as amended, the regulatory provisions of 43 CFR 3480, Federal lease terms and conditions, and will achieve maximum economic recovery (MER) of the Federal coal. Therefore, we recommend partial approval of the R2P2 for this permit action.

Sincerely yours,

Mary Johnson
for

Assistant District Manager
Mineral Resources

Enclosure:
Mine Projection Map

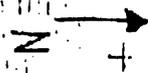
cc: SD, Utah (U-921), w/enclosure
DM, Moab (U-065), w/enclosure
Office of Surface Mining, Denver, w/enclosure
PacifiCorp, SLC, Utah, w/enclosure
Manti-LaSal NF, Price, Utah, w/enclosure

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RESERVES COMMITTED TO
WATER AND PREPARATION FACILITY

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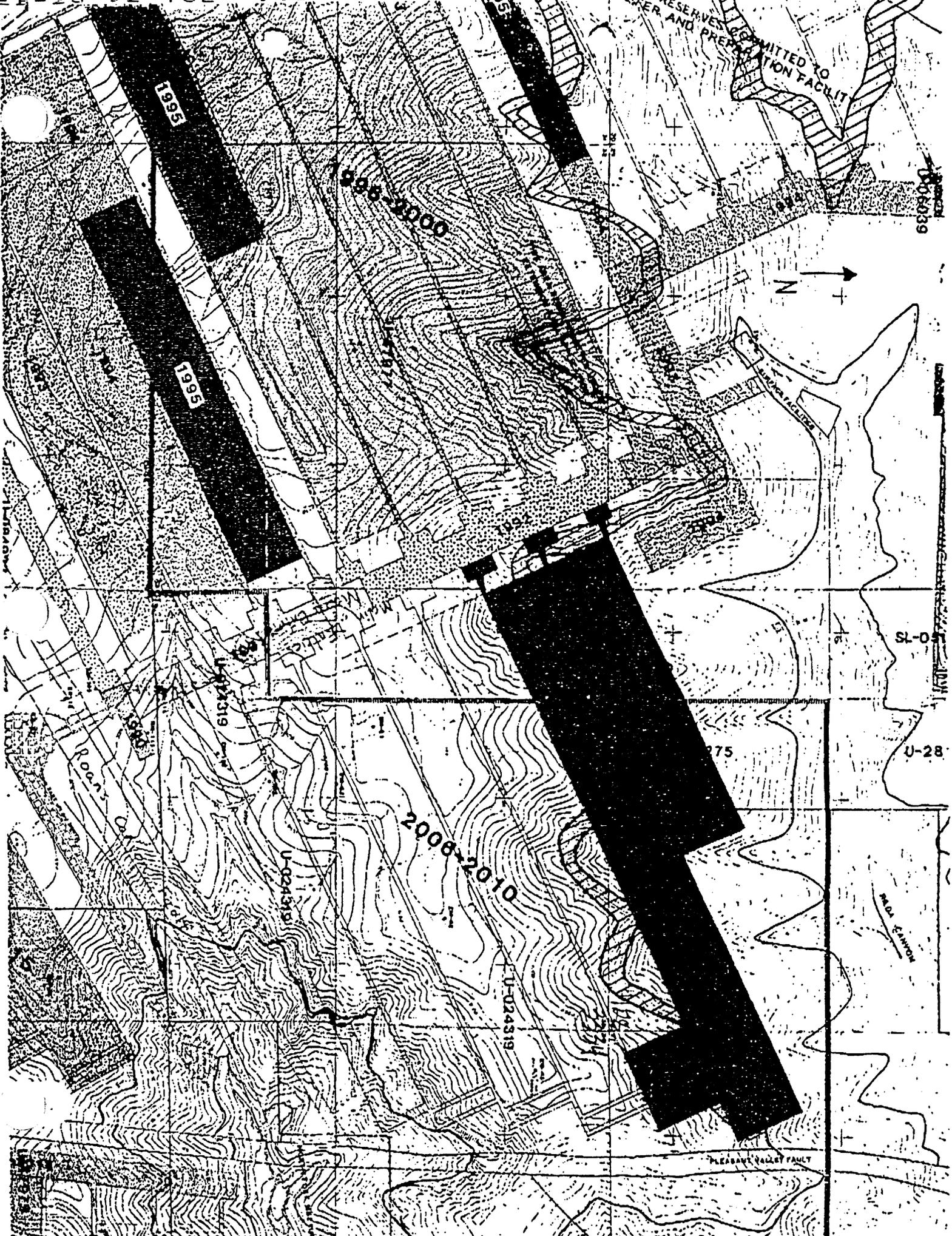
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PALA ZAVON

PLEASANT VALLEY FAULT





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BUREAU OF LAND MANAGEMENT

Moab District
Price River/San Rafael Resource Area
125 South 600 West
P. O. Box 7004
Price, Utah 84501

July 16, 1997

3482
U-06039
U-024317
SL-051221
U-2810
(UT-066)

Pamela Grubaugh-Littig
Permit Supervisor
Department of Utah Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Re: Resource Recovery and Protection Plan (R2P2), PacifiCorp. Deer Creek Mine, Emery County, Utah

Dear Ms. Grubaugh-Littig

On May 16, 1997, the Bureau of Land Management (BLM) received from your office for our review/comments, PacifiCorp's response to technical deficiencies concerning the North Rilda area. Also, on July 2nd, we received from the Manti-LaSal National Forest (FS), PacifiCorp's revisions concerning:

- 1) the ground stability of the 4th North Mains crossing of the Right Fork Rilda Canyon; and
- 2) the Castlegate Escarpment statement of mining in the North Rilda area,

which was submitted to their office on the same date.

In addition to your request for BLM's review/comments, the FS has requested documentation of our findings concerning the location and entry stability of the proposed route (4th North Mains) accessing reserves of the Blind Canyon and Hiawatha coal seams in the North Rilda area.

As you may be aware, an approved R2P2 for the subject area is already in place. It is our understanding that PacifiCorp is now requesting to expand the current Deer Creek mining operation/mine permit area. In part, PacifiCorp seeks partial approval to afford a timely access into the North Rilda area in order to sustain the current level of longwall coal production.

According to the proposal, the 4th North Mains would access the reserves by advancing beyond the current permit boundary to the northern boundaries of Federal coal leases U-06039 and U-024317. Then, a series of east-west-oriented longwall panels would be developed along the east side of the Mains. These panels would be developed and sequentially extracted from the north to the south. PacifiCorp proposes to confine mine development at this time to the Blind Canyon coal seam and limit panel extraction to the four most northern panels.

Approval to complete extraction of the remaining panels in the Blind Canyon and Hiawatha Seams, which are developed under the Castlegate Escarpment, would be subject to the findings of the on-going Castlegate Escarpment Geotechnical Studies and number of other requirements made by the FS (archaeology survey, Spotted Bat survey, EA) on the affected areas.

BLM's findings regarding the 4th North Mains:

The projected access route into the North Rilda area is constrained by the Mill Fork Fault Zone to the west, a shallow overburden to the east, and a potential for the coal seam to pinch out in a westerly direction. These adverse geologic conditions more or less dictated the location of the access route and have precluded alternative routes into the subject area. The exact location of the 4th North Mains will be determined upon delineation of the Mill Fork Fault Zone or by the seam geology of the Blind Canyon Seam (insufficient seam height). PacifiCorp's intent is to explore the fault zone and seam geology by using either the continuous miner, in-mine drilling, surface drilling, or any combination of the three methodologies.

Subsequently, the access route will pass under an upland ephemeral stream in the right fork of the Rilda Canyon which has been designated by the Surface Managing Agency (SMA) as an important alluvial/hydrologic system and riparian zone. Due to the potential for surface impacts from subsidence, the SMA has restricted mining based on their concerns for the preservation of this hydrologic resource.

In efforts to ensure long-term stability of the underground excavation and to protect against surface impacts in the riparian zone, PacifiCorp has proposed the following mine design criteria:

- 1) Include, per SMA's request, a protective buffer zone of sufficient size to isolate the riparian zone from all potential effects of mining.
- 2) Utilize an entry/pillar configuration consisting of a 5-entry system with staggered crosscuts on 80x150-foot centers, with an entry width of 20 feet and entry height of 8 feet.
- 3) Provide secondary roof support, as needed, to maintain the long-term stability of the underground workings and to prevent/limit the potential of any future surface impacts.

Also, PacifiCorp has agreed to comply with the stipulated approval of the Minor Modification Request (The Proposed Location for the 4th North Mains off the 10th West Mains, North Rilda Canyon Reserve Access) dated February 13, 1997, from our office which states in part:

"PacifiCorp shall submit a written evaluation documenting entry and pillar stability for the Rilda Canyon Fork area. The specific areas to be addressed are the **4th North Mains in the Blind Canyon Seam** and the **access entries to the Hiawatha Seam reserve** where the entries pass under the riparian zones, as illustrated on Enclosure 2. The evaluation shall determine whether additional secondary entry support is needed to prevent the occurrence of surface impact due to mining. The evaluation shall be submitted 60 calendar days prior to final abandonment of the North Rilda Canyon area. The evaluation shall be subject to BLM's approval based on verification of the reported documentation."

The BLM concurs with PacifiCorp on the following:

We find the requested "riparian buffer zone" to be of sufficient size. It has been designed using a 15° "angle-of-draw"/"angle-of-influence" calculated from the Hiawatha Seam to delineate the zone. The referenced 15° "angle-of-draw" is an industry/agency-accepted standard, based on full extraction mining. In addition, PacifiCorp's mining experience at the Deer Creek, Trail Mountain and Cottonwood Mines over the last 20 years provides a sound basis for the design criteria. Furthermore, the area has been restricted to first mining, making the required buffer zone a moot issue.

In regard to the location and long-term stability of the 4th North Mains:

1) We recognize PacifiCorp's difficulty in determining the best location for the 4th North Mains and feel that an attempt to locate the Mill Fork fault zone by means of exploring with a continuous miner will not impact the surface or affect the hydrologic regime. However, it will provide data for maximizing recovery of the coal resource.

2) PacifiCorp, at the request of the SMA, provided step-by-step calculations to illustrate how the factor of safety was calculated for the coal pillars and entry opening. The safety factors were calculated by using **standard industry-accepted equations**. The calculated safety factors for pillar stability and entry opening are in the range of 3.57 to 23.94 and 4.92, respectively. In standard industry practice, safety factors used to define stable conditions and long-term stable conditions are 1 and 1.5 to 2, respectively. It is evident that PacifiCorp is well beyond the acceptable values for long-term stability.

Finally, approval for full-extraction (longwall) mining under the Castlegate Escarpment will be based on:

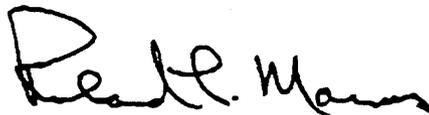
- 1) the **Castlegate Escarpment studies** provided by PacifiCorp; and
- 2) an **objective environmental analysis** of the affected resources by the SMA,

prior to BLM's determination.

The BLM has reviewed the proposed R2P2 Revisions/Deer Creek Mine Permit Expansion and all available information concerning the mining of the subject area. The BLM has determined that PacifiCorp's R2P2 for the Deer Creek Mine appears to be a logical and prudent mine plan. It is technically complete and complies with the Mineral Leasing Act of 1920, as amended, the regulations at 43 CFR 3480, the lease terms and conditions, and will achieve maximum economic recovery of the Federal coal. Therefore, we recommend approval of the proposed Deer Creek Mine permit expansion.

If you have any questions, please contact Barry Grosely in the Price River/San Rafael Resource Area at (801) 636-3606.

Sincerely,



Area Manager

cc: Manti-LaSal National Forest
599 Price River Drive
Price, Utah 84501

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
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Salt Lake City, UT 84145-0155
<http://www.blm.gov>



IN REPLY PLEASE REFER TO:
3482/ U-06039
(UT-923)

Certified Mail--Return Receipt Requested
Certificate No.

Mr. Carl Pollastro
Director of Technical Services and Project Development
Interwest Mining Company
One Utah Center, Suite 2000
Salt Lake City, Utah 84140-0200

Re: Minor Modification of Resource Recovery and Protection Plan (R2P2), 1st Right Sub-Mains and Ventilation Portals, Hiawatha Seam, Deer Creek Mine

Dear Mr. Pollastro:

The Bureau of Land Management (BLM) received a request dated 22 March 2005 from PacifiCorp by and through Interwest Mining Company (Interwest) and energy west Mining Company as mine operator to change the approved R2P2 by extending the 1st Right sub-mains and provide ventilation portals (request attached).

PacifiCorp proposes to drive entries to access ventilation portal sites as shown on the attached mine map "1ST Right Sub-Main Extension & Projected Portal Sites Right-Fork Rilda Canyon." BLM understands this plan is based on extensive underground drilling to better define the geologic conditions, including the areas of naturally burned coal (map attached showing extent of underground drilling).

However, BLM understands further modifications could become necessary as actual mine conditions are encountered and additional analysis of the surface uses is completed.

The mine personnel project the recoverable coal reserves will increase by some 35,000 to 50,000 tons with this proposed R2P2 change (attached: Request for R2P2 Modification).

BLM approves development mining of the 1st Right Sub-Mains Extension with the planned rock slopes as shown. Should it become necessary to alter this configuration, PacifiCorp is required to consult with BLM and further modifications could be necessary. Should PacifiCorp store rock

James
3/15/05
Copy Wayne H. H.
MAR 25 2005

Jim S. Steved,
Shawn
RECEIVED
MAR 28 2005
DIV. OF OIL, GAS & MINING

from the rock slope drivages, the three (or more) entry access to coal remaining inby from the end of the 1st Right Sub-Main Extension will be maintained and not blocked with rock or other materials placed by the mine.

This approval of a minor modification to an existing R2P2 is Categorically Excluded from National Environmental Policy Act (NEPA) analysis in that no new surface disturbance will occur from this action as stated in Overview of BLM's NEPA Process, February 1997, Appendix 2, page 2-7 (F)(7).

The modification of the R2P2 complies with the Mineral Leasing Act of 1920, as amended, the regulations at 3480, and the lease terms and conditions. The modification will achieve maximum economic recovery of the federal coal partly because of efforts to recover coal under a powerline right-of-way and continuing efforts to mine as near low coal areas as possible. The low coal areas are much larger than originally projected.

The modification to the R2P2, as depicted on mine map "1st Right Sub-Main Extension & Projected Portal Sites Right-Fork Rilda Canyon" is approved, contingent on the requirements stated above and pending State Permit approval. A copy of the approved mine map is enclosed. If you have any questions, please contact Jeff McKenzie of my staff at (801) 539-4038.

Sincerely,
JAMES F KOHLER

James Kohler
Chief, Solid Minerals

Enclosures:

Approved Mine Map
Reference Mine/Geologic Map
Reference Underground Horizontal Drilling Map

cc: UT-070, Price, Utah (w/encl.)
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Salt Lake City, Utah 84114-5801
Energy West Mining Company (w/encl.)
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Huntington, Utah 84528