

December 10, 1998

Utah Coal Regulatory Program
Division of Oil, Gas and Mining
1594 North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Attention: Daron Haddock, Permit Supervisor

*Response
Copy Daron (all)*

Re: Incidental Boundary Change on Federal Coal Lease U-06039, PacifiCorp, Deer Creek Mine, ACT/015/018-98A, File #3, Emery County, Utah

Volume 11 - North Rilda Area, PacifiCorp, Deer Creek Mine, ACT/015/018, Emery County, Utah

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, herewith submits a revised Deer Creek MRP - Volume 11: Hydrologic Section R645-301-700: text section in response to concerns raised during the Federal Coal Lease U-06039 lease modification review.

The concerns raised during the review include:

Concern: *The existing plan commits to conducting baseline sampling for a two year period 1997-1998 (Mill Fork Canyon). The amendment proposes baseline was conducted in 1997.*

Response: **PacifiCorp initially included monitoring in Mill Fork Canyon prior to the North Rilda submittal without the request from the Division or the surface management agency. In an amendment submitted on January 21, 1997, Deer Creek Mine Amendment 97B, PacifiCorp included two sites in Mill Fork Canyon previously monitored by Arco Coal Company and the United States Geological Survey (site 76 near the confluence of Huntington Creek: Open File Report 81-539). Amendment 97B was revised on September 25, 1997 and approved by the Division on November 19, 1997. In the approved hydrologic monitoring plan, only operational monitoring of Mill Fork Canyon (sites MFA01 and MFB02) is required. The approved monitoring plan in Volume 9 - Hydrologic Section conflicts with monitoring described in Deer Creek Mine Volume 11 - North Rilda Area. PacifiCorp commits to revising both Volume 9 - Hydrologic Section and Deer Creek Mine Volume 11 - North Rilda Area to include baseline monitoring of Mill Fork starting in the 4th Quarter 1998 through the 4th Quarter 2000 (see the following excerpt from the revised Volume 11 - North Rilda Area).**

Huntington Office:
(435) 687-9821
Fax (435) 687-2695
Purchasing Fax (435) 687-9092

Deer Creek Mine:
(435) 687-2317
Fax (435) 687-2285

Trail Mountain Mine:
(435) 748-2140
Fax (435) 748-5125

Revised Section of Volume 11 - North Rilda Area: Page 52-53

Historical monitoring data collected by Beaver Creek Coal Company - No. 4 Mine and the United States Geological Survey (site No. 76 Open File Report 81-539) has been will be incorporated in PacifiCorp's hydrologic database. Operational water quality monitoring was conducted during 1997 and 1998 (refer to the Quarterly Hydrologic submittals). Baseline quality analysis was initiated in November 1998. In accordance with the Hydrologic Monitoring Plan, baseline quality analysis will be conducted for a two-year period, fourth quarter 1998 - fourth quarter 2000 (refer to the respective Annual Hydrologic reports). Thereafter, baseline analysis will be repeated once every five (5) years.

Appendix A of Volume 9 - Hydrologic Section will be updated to reflect baseline monitoring in Mill Fork Canyon (refer to separate amendment submitted on December 11, 1998).

Concern: According to the amendment page 103 and other pages "The stream buffer zone delineates the area restricted to full extraction mining." However, in R645-301-500 Appendix 1, page 3 the plan indicates the area is restricted from full extraction mining.

Response: To clarify this situation, Volume 11 - North Rilda Area R645-301-700 section has been revised to conform with R645-301-500 Appendix 1 (see the following excerpt from Volume 11 - North Rilda Area R645-301-700, page 102).

Revised Section of Volume 11 - North Rilda Area: Page 102

The stream buffer zone delineates the area restricted from full extraction mining.

Concern: The site upstream of RCF1 to monitor surface/groundwater relationships should be retained as approved in the existing plan. The overburden between the stream bed and the Blind Canyon panels is approximately 148-200 feet (drill holes EM-160 and EM162 drawing DU1687E, 9/30/98) justifies retaining this monitoring location.

Response: Due to the thickness of overburden at the original 4th North Mains stream crossing (115 feet center entry overburden) a monitoring site was added above the mains to monitor possible surface/groundwater concerns. Upon completion of the Rilda Canyon Exploration Program conducted in 1997, a meeting was held with BLM, DOGM, (USFS was invited but did not attend, a separate meeting was held the USFS at a later date), to discuss the results of the exploration and to present a revised stream crossing plan. Based on the drilling results, the 5th North Mains were relocated approximately 800 feet to the west of the original location, thereby increasing the overburden from 115 feet to 195 feet (center entry overburden). As discussed in the Volume 11 - North Rilda Area, R645-301-700 Hydrologic Section, the only groundwater intercepted during drilling was limited quantities (less than 5 gallons per minute) associated with the colluvial/alluvial deposits. Based on the drilling results and the dry conditions experienced in the mine (5th North Mains stream crossing area), the relocation of the mains to the west, and a commitment to conduct special subsidence monitoring over the mains, monitoring of an additional site was not necessary. After discussions with the Reclamation Hydrologist in which the difficulties of measuring stream flow during high runoff periods was discussed, PacifiCorp will retain the additional monitoring point adjacent to EM-163 and will measure quantity during base flow conditions, (see excerpt from Volume 11 - North Rilda Area below).

Revised Section of Volume 11 - North Rilda Area: Page 50

Locations:

- (1). Right Fork of Rilda - RCF1*
- (2). Left Fork of Rilda - RCLF1 (Field data only)
- (3). Left Fork of Rilda - RCLF2 (Field data only)
- (4). Rilda Canyon - RCF2 (Field data only)
- (5). Rilda Canyon - RCF3
- (6). Rilda Canyon - RCW4 (Map HM-1, Vol. 9 - Hydrologic Section and; Map HM-10, included with this submittal).

* During mining of the North Rilda leases, an additional site has been added upstream of RCF1 (adjacent to EM-163) to monitor surface/groundwater flow relationships. Flow will be measured yearly during base flow conditions.

Concern: *Stipulation 1 in Attachment A in the permit: Special conditions for ground water monitoring in the North Rilda Area, does not allow a description for water that may travel along the graben/fault/fracture systems. The condition should be changed to the following:*

- 1. If during development significant quantities of ground water are encountered which issue from the fault zone, the water volume issuing from this zone should be quantified and initial inflow should be sampled for water quality according to the approved baseline parameters and must include tritium and carbon age dating.*

Response: **PacifiCorp discussed concerns with this stipulation requiring "tritium and carbon age dating" with the Reclamation Hydrologist. During isotopic sampling, sufficient volume is collected to perform the required test including carbon age dating. The samples are first tested for amount of tritium, if the results indicate modern water, testing for carbon age dating is not required. If the test indicates the sample is not modern water, then the sample is tested for carbon age dating. PacifiCorp has revised Volume 11 - North Rilda Area R645-301-700 Hydrologic Section to conduct include isotopic sampling on a systematic approach (see excerpt from Volume 11 - North Rilda Area).**

Revised Section of Volume 11 - North Rilda Area: Page 99

Stipulation in the Deer Creek permit renewal, (February 6, 1996), "*If during entry development, sustained quantities of groundwater are encountered which are greater than 5 gpm from a single source in an individual entry, and which continue after operational activities progress beyond the area of groundwater production, PacifiCorp must monitor these flows for quality and quantity under the approved monitoring plan*". In addition to the standard plan described above, if mining encounters significant quantities of groundwater which issues from a fault zone, PacifiCorp will, quantify the volume, sample for water quality according to the approved monitoring plan (baseline parameters for two year period), conduct isotopic sampling using a systematic approach (phase 1: tritium analysis, phase 2: depending the results of the tritium sampling, perform carbon age dating)

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Enclosed is seven redlined copies of the following information for your review:

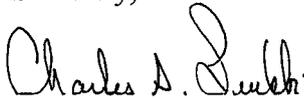
Revision to Deer Creek Mine MRP Volume 11 - North Rilda Area

R645-301-700 HYDROLOGY

⇒ Replace entire text section (retain Maps)

If there are any questions or concerns please call Chuck Semborski at 687-4720 or Bob Willey 687-4722.

Sincerely,



Charles A. Semborski
Geology and Environmental Supervisor
enclosures:

CC: Blake Webster (without enclosures)
Carl Pollastro (without enclosures)
Chuck Semborski (without enclosures)
Barbara Adams (Fil)

APPLICATION FOR PERMIT PROCESSING

Permit Change <input checked="" type="checkbox"/>	New Permit <input type="checkbox"/>	Renewal <input type="checkbox"/>	Transfer <input type="checkbox"/>	Exploration <input type="checkbox"/>	Bond Release <input type="checkbox"/>	Permit Number: ACT/015/018
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Title of Proposal: Amendment, PacifiCorp, Deer Creek Mine, ACT/015/018, Emery County, Utah	Mine: DEER CREEK
	Permittee: PACIFICORP

Description, include reason for application and timing required to implement: **Revisions to Volume 11: North Rilda Area, Hydrologic Section**

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease.
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	2. Is the application submitted as a result of a Division Order? DO # _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Is the application submitted as a result of a Violation? NOV # _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain: _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

Attach 7 complete copies of the application.

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. (R645-301-123)

Charles A. Semborski Charles A. Semborski - Geology/Permitting Supervisor 12/10/98
 Signed - Name - Position - Date

Subscribed and sworn to before me this 11 day of Dec, 19 98

Barbara J. Adams
 Notary Public

My Commission Expires: 10-13- 19 91

Attest: STATE OF _____ COUNTY OF _____

NOTARY PUBLIC
BARBARA J. ADAMS
 15 North Main
 Huntington, Utah 84520
 My Commission Expires
 October 13, 2000
STATE OF UTAH

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DIV. OF OIL, GAS & MINING

ASSIGNED TRACKING NUMBER

