

0029



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

ACT/015/018  
#2

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

June 22, 1995

Chief of Federal Programs  
Office of Surface Mining  
1999 Broadway, Suite 3320  
Denver, CO 80202-5733

Re: Rilda Canyon Surface Facilities, Response to Deficiencies of August 25, 1994, Deer Creek Mine, PacifiCorp, ACT/015/018-94E, Folder #2, Emery County, Utah

Enclosed please find the PacifiCorp response to the August 25, 1994 Division deficiency for the Rilda Canyon Surface Facilities. The scope of work has been modified to disturb only 2.01 acres which includes construction of the facility pad and access road. The cover letter has also been enclosed that should facilitate where changes have been made to the original submittal.

Please review the enclosed material and notify the Division by July 14, 1995 with your comments and/or concurrence. If you have any questions, please call me.

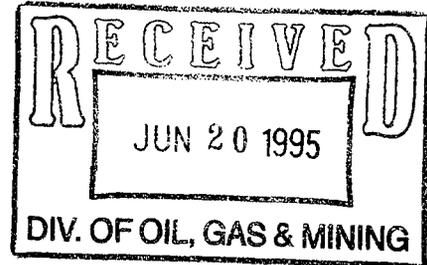
Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "Pamela Grubaugh-Littig".

Pamela Grubaugh-Littig  
Permit Supervisor

Enclosure

cc: A. Abbs, OSM-AFO  
M. Bailey, BLM, Price  
R. Williams, USFWS  
J. Kaiser, Manti La Sal National Forest  
M. Page, Water Rights, Price  
B. Bradford, DEQ  
R. Valentine, DWR  
M. Evans, State History  
Scott Hirschi, State School and Institutional Trust Lands Administration (w/o enclosure)



June 15, 1995

Utah Coal Regulatory Program  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Attention: Mr. Daron Haddock

Re: Response to Deficiencies, Rilda Canyon Surface Facilities, PacifiCorp, Deer Creek Mine, ACT/015/018-94E, Folder #2, Emery County, Utah *Copy from call for amendment file (12 copies transmitted)*

Transmitted herewith, please find fourteen (14) copies of the above referenced information. This material is submitted in response to your letter of August 25, 1994. To facilitate review of the accompanying information, please refer to the attached copy of your letter. Specific requested items are numbered to correspond with the following:

<u>Item No.</u>	<u>Reference</u>
1	Further information regarding the use of the Rilda Canyon road is found at pages 2-218.3 through 2-218.7. This information was submitted in August of 1994; however, 14 copies are also provided with this submission.
2	Topsoil and vegetation removal are discussed at pages 3-91 and 3-92 and Plate 2-17A. This information was also submitted in August of 1994. Fourteen additional copies are provided herein.
3	Riparian enhancement, restoration and mitigation measures are described at pages 4-54.4 and 4-54.5.
4	Excess spoil handling and disposal are discussed at pages 3-92 and 3-93.
5	Additional baseline vegetation information is found at pages 2-173.3, 2-173.8, 2-173.9, 2-173.10, 2-173.16, 2-173.17, 2-173.27, 2-173.28, 2-173.31 and 2-173.35 through 2-173.48.
6	The SCS range condition information for the reference areas is found at page 2-173.49.

- 7 Additional information regarding the T,E&S plant surveys is found at page 2-173.1. This information was originally submitted in August of 1994; however, 14 additional copies are provided with this submission.
- 8 Wildlife protection and mitigation measures are discussed at pages 2-210.6, 2-210.7 and 3-94.2.
- 9 Revegetation planting mixes and woody plant density standards for success are discussed on pages 4-54.2 and 4-54.3.
- 10 The disturbed area includes the access road, see Drawing CE-10883-EM. Reclamation cost estimates also include the access road, see pages 4-54.7 and 4-65.1, Item 17B.
- 11 Slope stability analysis information is found at pages 3-94.1, 3-94.2 and 3-95 through 3-110.
- 12 Backfilling and grading mass balance information is provided at page 4-54.6.
- 13 Reclamation cost estimate information is found at pages 4-54.7 through 4-54.13.
- 14 Information regarding MSHA approval of discharging surface water, from the facility pad, into the mine is found at page 3-94.
- 15 Information regarding protection of the hydrologic balance and effluent limitations is presented at pages 3-94 and 3-94.1.
- 16 Information regarding operations within the stream buffer zone and compliance with state and federal water quality standards is provided at pages 3-94.1 and 3-111 through 3-114.
- 17 The location of the topsoil pile silt fence is clarified at page 3-92.
- 18 The Rilda Canyon Facility Access Road was designed in cooperation with Manti-La Sal National Forest personnel. The resultant proposal is consistent with the guidance provided by the surface management agency. This is stated at page 3-90 and 3-91.

In addition to the above items, the following pages have been updated as a result of this submission:

<u>Page NO.</u>	<u>Modification</u>
3-39	Rilda Canyon Facilities included in ASCA list for Deer Creek Mine.

3-42.1	Access road length reduced from 1350 feet to 1150 feet. Added reference to additional drawing Packet 3-9B.
4-53 & 4-54	Updated reclamation costs to include Rilda Canyon Surface Facilities.
4-54.1	Removal of powerline is discussed, off-site disposal area identified and number of portals at Rilda reduced from three to two.
4-65.1 thru 4-65.3	Updated reclamation costs based on reduced scope of facilities from 2.5 acres to 2.01 acres, redesign of road and reduction of portals from three to two.
Volume 3, Appendix VII	Surface Runoff Control Plan has been revised to reflect the reduced scope of project and to accommodate Manti-La Sal National Forest hydrologist's suggestions.

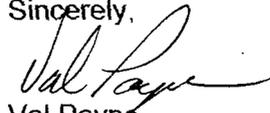
Text modifications are indicated in bold, italicized type.

Fourteen (14) copies of the drawings are submitted. They have been updated as necessary to reflect design changes. Additionally two (2) drawings, CE-10890-EM (Plate 3-9B) and CE-10891-EM, Sheet 3 of 3 (Plate 4-4A) are added with this submission.

Forms DOGM-C1 and C2 are included as required.

Thank you for your assistance in this permitting action. An expedited review is appreciated. If you have questions regarding this information, please call me at (801) 687-4722.

Sincerely,



Val Payne  
Sr. Environmental Engineer

cc: M. Moon  
B. Webster  
File



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

August 25, 1994

Mr. Val Payne, Sr. Environmental Engineer  
PacifiCorp  
P. O. Box 1005  
Huntington, Utah 84528

Re: Initial Completeness Review, Rilda Surface Facilities, PacifiCorp, Deer Creek Mine, ACT/015/018-94E, Folder #3, Emery county, Utah

Dear Mr. Payne:

The Division has completed a review of your application to construct surface facilities in Rilda Canyon. The enclosed document outlines the results of that review. As we have discussed on the telephone, some of these items are considered administrative completeness items and will need to be addressed before your plan can be considered administratively complete and before public notice is given that a complete application is on file. The remaining (majority) issues identified in the review are technical and will need to be addressed prior to approval of the project.

If you have any questions regarding the review, please give me a call.

Sincerely,

A handwritten signature in black ink that reads "Daron R. Haddock".

Daron R. Haddock  
Permit Supervisor

Enclosure

cc: P. Baker  
P. Grubaugh-Littig  
S. Johnson  
J. Kelley  
H. Sauer

RILDAICR.COV

# INITIAL COMPLETENESS REVIEW RILDA CANYON SURFACE FACILITIES

PacifiCorp  
Deer Creek Mine  
ACT/015/018

August 24, 1994

**R645-300-133.100**

**Complete and Accurate Application**

## Discussion

PacifiCorp proposes to build a 1,350-foot long road to the proposed facilities area from the junction of the Left and Right Forks of Rilda Creek. Vehicle access on this road would be controlled by a locked gate, but the road would continue to serve as a Forest Development Trail. The road would only be used in emergency situations; routine inspections would be from underground. Surface environmental compliance inspections would be conducted on foot from a turnaround near the forks.

In addition to the road from the junction of the Left and Right Forks of Rilda Creek, the road from the North Emery Water Users Association springs would be improved as part of this project. The Forest Service Project Scoping Document for the Rilda Canyon surface facilities says that Forest Development Road 50246 from the North Emery Water Users Association springs (end of county road) to the Forks of Rilda Canyon would be reconstructed to a one-lane standard with turnouts and a 14-foot gravel surface. A gravel turnaround/parking area would also be constructed at the fork. Clearly, the Forest Service considers improvements to this portion of the road to be part of the project.

The PacifiCorp proposal does not include the improvements to this road. To determine whether the Forest Development Road from the springs to the fork in Rilda Canyon should be included in the permit and disturbed area boundaries, some of the definitions in R645-100-200 need to be applied. A "Public Road" is defined as: *"..a road, (a) which has been designated as a public road pursuant to the laws of the jurisdiction in which it is located, (b) which is maintained with public funds in a manner similar to other public roads of the same classification within the jurisdiction, and (c) which meets road construction standards for other public roads of the same classification in the local jurisdiction."* A "road" means a surface right-of-way for purposes of travel by land vehicles used in coal exploration or coal mining and reclamation operations. The term includes access and haul roads constructed, used, reconstructed, improved, or maintained for use in coal exploration, or within the affected area of coal mining and reclamation operations. The term may not include public roads as determined on a site specific basis.

Assuming that the Forest Development Road above the North Emery Water Users Association springs is considered a "public road," the Division must determine on a "site specific basis" whether this road meets the definition of "road." Because, according to the

scoping document, the road is being improved as part of the project, the improvements should be considered mining and reclamation activities that need to be permitted.

Below the North Emery Water Users Association springs, the bottom of Rilda Canyon is within the "future permit area" west of the center of Section 28, Township 16 South, Range 7 East. Below this, the center of the canyon is on the border of the "future permit area" at one point, then it crosses a small portion of the "future permit area" in Section 22 before leaving it completely. Although PacifiCorp considers this the future permit area and it is not presently permitted, the Division needs to determine if improvements to the road are being made in anticipation of future needs.

The road is currently being widened in the lower part of the canyon. Reasons for this work and what designs are being used are unknown. It may be strictly coincidental that these improvements are being made at a time when PacifiCorp is proposing to build the Rilda Canyon facilities. PacifiCorp should provide the Division further information about how much they plan to use this road compared to how much it is used for other purposes.

**Deficiency:**

1. PacifiCorp needs to supply further information about the use of the Rilda Canyon road.

**R645-301-231.100**

**Topsoil Removal**

**Deficiency:**

1. The permittee must describe the methods by which topsoil will be removed. This should include the steps which will be taken to exact the depth of topsoil removal.

**R645-301-232.600**

**Topsoil Salvage**

**Discussion**

Prior to topsoil salvage operations the permittee must remove that vegetation which would interfere with topsoil salvage.

It is preferable to minimize the amount of vegetation removed and maximize

vegetation incorporated into the soil. The native seed, organic matter and nutrient availability realized through mulching the soil with native vegetative will increase the likelihood of successful vegetation establishment. The abundance of coniferous trees and deciduous trees and shrubs within the proposed disturbance may be utilized in this manner. Machinery is commercially available which is capable of removing the first few inches of topsoil and vegetation simultaneously. The resulting medium consist of chopped-up trees, shrubs, herbaceous vegetation, seeds, roots and soil. This practice may be employed in lieu of seeding, mulching and fertilizing the topsoil stockpile.

#### **R645-301-342.100 & 358.400      Enhancement Measures**

The following species identified in the vegetation baseline survey for the Aspen/Fir/Dogwood community are riparian indicator species in accordance with the U.S.D.A./Forest Service Riparian Community Type Classification of Utah and Southeastern Idaho (R4-Ecol-89-01, December, 1989): *Acer grandidentatum*; *Populus tremuloides*; *Galium triflorum*; *Geranium richardsinii*; *Smilacina stellata*; *Veratrum californicum*. The majority of the proposed disturbance is within the Aspen/Fir/Dogwood community. Based on the information provided above the Aspen/Fir/Dogwood community must be classified as a riparian community.

#### **Deficiency:**

1. The permittee must describe riparian enhancement, restoration and/or replacement measures that will be employed during the reclamation and postmining phase of the operation.

**R645-301-412.300, R645-301-528 et. seq., R645-301-535 et. seq., R645-301-553.200 et. seq., R645-301-731.300 et. seq., R645-301-745. et.seq.**

#### **Handling and Disposal of Fill**

The Rilda Canyon Surface Facilities proposal includes plans to import approximately 17,000 cubic yards of fill material from outside the proposed permit area. The "borrowing" of fill material must be considered Surface Operations and Impacts Incident to an Underground Coal Mine (R645-301. Administration). Therefore, the excavation of fill material must be performed within a permitted area and comply with all applicable provisions of the Utah Coal Mining Rules. This would include, but not be limited to, the following: geologic characterization; bonding and reclamation of the borrow site; determination of the

materials acid- and/or toxic-forming and alkalinity producing potential, etc.

At the time of final reclamation the permittee proposes that approximately 10,000 cubic yards of fill will remain on site and 7,000 cubic yards will be "... hauled off-site by the reclamation contractor and disposed of in accordance with current regulations." All excess spoil must be disposed of within a designated portion of a permitted area (R645-301-535 et. seq.). The permittee's disposal plans for the excess spoil produced during mining activities is in contravention with the Utah Coal Mining Rules.

**Deficiency:**

- 4
1. The permittee must adequately address regulations pertaining to excess spoil handling and disposal.

**R645-301-320**

**Environmental Description**

**Discussion**

***Vegetation Information***

The application includes a vegetation study done in 1990 by Mt. Nebo Scientific. Three vegetation communities: spruce/fir coniferous forest, aspen/fir/dogwood, and mountain brush/salina wild rye, would be disturbed by the facilities. However, since less than one acre of the spruce/fir coniferous forest would be affected, the vegetation in this area was not described. The report also contains quantitative vegetation information for aspen/fir/dogwood and mountain brush/salina wild rye reference areas.

Approved methods were used to measure vegetation. With two exceptions, sample sizes were adequate. The exceptions are the overstory coverage in the proposed disturbed aspen/fir/dogwood community and the vegetation cover in the mountain brush/salina wild rye reference area. Required sample sizes for these two areas are 200 and 25 respectively.

PacifiCorp needs to take adequate samples for baseline vegetation information. Achieving sample size adequacy would not be difficult for the mountain brush/salina wild rye reference area, but it would probably be very time-consuming and expensive to take 200 overstory samples in the aspen/fir/dogwood community. There is obviously too much variability in the overstory measurements. These are part of the vegetative cover information and would not be as variable if they were included with the measurements of vegetative cover closer to the ground.

The application does not include vegetation productivity information or any information showing the range condition of the proposed reference areas. The Soil Conservation Service needs to check the proposed reference areas for range condition. They would also be able to supply the needed productivity information.

**Deficiencies:**

5

1. Baseline vegetation information in the application needs to meet minimum sample size requirements.

6

2. The Division needs to receive information on the range conditions of the reference areas before they can be approved. The application also needs to contain vegetation productivity information for the areas to be disturbed and for the reference areas.

***Wildlife and Threatened and Endangered Species***

The Rilda Canyon surface facilities would be built in an area designated by the Utah Division of Wildlife Resources as high priority deer summer range and critical elk winter range.

PacifiCorp has conducted annual raptor surveys in the area since 1986. Three nests have been found within one-half mile of the proposed facilities, but the facilities would only be visible from one of these nests. In 1986 and 1987, this nest was old and dilapidated, and it has not been found since then. The other nests have been active, inactive, and tended in various years since the surveys began.

The application says that no other high interest avian species are known to be present in the Rilda Canyon facilities area. However, prior to surface disturbing activities, surveys will be conducted in cooperation with the appropriate agencies, to determine if other species of interest are present. Appropriate mitigation measures will be developed with concerned agencies to address identified impacts.

Migratory birds of high federal interest other than raptors are known to nest in the Huntington Canyon area. Consultations with Wildlife Resources and the Forest Service and the possible additional surveys committed to in the application will determine what mitigation or protective measures might need to be taken.

The Mt. Nebo vegetation report says that a study by a biologist at PacifiCorp determined that no threatened or endangered species in this community will be impacted by

the proposed development. R645-301-130 says that all technical data submitted in the permit application will be accompanied by the names of persons or organizations that collected and analyzed the data, dates of the collection and analysis of the data, and descriptions of the methodology used to collect and analyze the data. Technical analyses will be planned by or under the direction of a professional qualified in the subject to be analyzed. The application needs to give some details of the threatened or endangered species study by the PacifiCorp biologist. It should describe when and how data was collected. It should also mention which species were looked for. There are several candidate threatened or endangered species that occur in the Huntington Canyon area. Did the survey check for candidates in addition to listed species? Although candidates may not have legal protection except under Forest Service regulation, it might be possible to avoid disturbing them if they occur in the area of proposed disturbance.

**Deficiency:**

- 7
1. The application needs to contain more information about the threatened and endangered plant survey. It should show when it was done, what methods were used, and what species were looked for.

**R645-301-330**

**Operation Plan**

**Discussion**

The operation plan says that vehicular access is controlled by a locked barrier gate near the public turnaround area. The road will continue to serve as a Forest Development Trail allowing access beyond the facilities area. Unauthorized access to the facility pad is controlled with fencing and a locked gate where the road enters the pad, and the trail continues beyond this point.

Vehicular use of the road will only occur in emergency situation. Routine access will be performed from underground. Environmental compliance inspections will be by foot from the public turnaround. Snow removal will only occur in emergency situations.

There is only a short section of trail beyond where the surface facilities would be. Beyond this, the bottom of the canyon is littered with downed aspen trees, and the side is very steep and difficult to hike.

Since the area is considered to be habitat of unusually high value as defined in R645-301-322.220 and R645-100-200, the application needs to contain a protection and

enhancement plan for fish and wildlife.

As part of the protection and enhancement plan, PacifiCorp needs to commit to not construct the facilities during crucial times for wintering elk, fawning deer, and nesting raptors. The combined crucial period for these species extends from December 1 to about July 31. If there are no nesting raptors in the area, the period could be ended on July 5. It may be possible to construct the facilities during this crucial time period after consultation with Wildlife Resources and if certain precautions are taken.

Wildlife Resources' main concern is with the loss of habitat in the bottom of the canyon. This area is borderline riparian and is very productive compared to nearby areas. They suggested fencing the stream against cattle, campers, and picnickers near the public turn around. However, since the stream is not perennial in this area, it would probably be more beneficial to fence a section of the stream lower in the canyon, perhaps one that has been heavily affected by livestock and human use. PacifiCorp needs to investigate the feasibility of this and other potential wildlife habitat protection and enhancement measures and propose mitigation for the disturbance.

**Deficiency:**

1. The application needs to contain a wildlife protection and mitigation plan to address concerns for wintering elk, fawning deer, and nesting raptors. It should also include a plan to mitigate for the loss of productive habitat.

**R645-301-340**

**Reclamation Plan**

**Discussion**

The revision includes no changes to the final reclamation plan. A few changes to the plan are needed.

Since the communities in Rilda Canyon do not precisely match the seed/planting mix names in the final reclamation plan, the application needs to specify which mixtures will be used in which locations. The pinyon-juniper mix is appropriate for the mountain brush/salina wild rye areas. With a few changes, the riparian mixture would be appropriate for the rest of the area.

The riparian mixture should be altered for this site and used on areas now classified as spruce/fir coniferous forest and aspen/fir/dogwood communities. Recommended changes

are to delete narrowleaf cottonwood and coyote willow and to add red osier dogwood (Cornus stolonifera) at a rate of 600 plants per acre. Dogwood might only need to be planted within approximately twenty feet of the bottom of the canyon. Narrowleaf cottonwood and coyote willow were not encountered in vegetation sampling, but dogwood is one of the dominant plants in the canyon bottom. Planting rates for the other species in the riparian mixture should be doubled in order to achieve the woody plant density standard for success discussed below.

Assuming that the range conditions of the reference areas are fair or better, the reference areas should be approved. There are some dissimilarities between the mountain brush/salina wild rye reference area and the corresponding area that would be disturbed. The area proposed for disturbance has greater vegetative cover (40.00 vs. 30.15%) and greater woody species density (4426.87 vs. 907.06) than the reference area. Although these differences are statistically significant, there are reasons the reference area should be accepted.

The area proposed for disturbance was previously disturbed although apparently not from coal mining. The vegetation community has been altered and probably does not represent what existed prior to the disturbance.

The topography of the mountain brush/salina wild rye area proposed for disturbance has also been altered. It appears that part of it was once a road. This part was not graded to match surrounding areas, so it is relatively flat compared to the reference area. In final reclamation, the slope will be graded to blend with the surrounding area. The slopes will not, generally, be quite as steep as those in the surrounding area, but they will be steeper than they are presently. For this reason, the vegetation will probably more closely match what is in the reference area than what occurs in the area proposed for disturbance.

The Division is required to consult with and gain approval from Utah agencies responsible for the administration of forestry and wildlife programs for the woody plant density standard for success. The density standards established in consultation with Wildlife Resources are 900 and 3000 woody plants per acre for mountain brush/salina wild rye and aspen/fir/dogwood (including spruce/fir coniferous forest) respectively.

The density for the mountain brush/salina wild rye community is nearly identical to the baseline density for the reference area (907) and the planting rate (900). Although the revegetation plan does not allow for any seedling mortality, there should be some natural invasion during the extended responsibility period. The Operator may want to consider increasing the planting rate to accommodate seedling mortality.

The density standard for the aspen/fir/dogwood community is approximately one-half the number currently growing in that area. However, some of the species in the planting mix reproduce vegetatively and would be expected to increase through the extended responsibility period. Natural invasion will probably occur, also.

**Deficiencies:**

- 9 {
1. For revegetation of Rilda Canyon, PacifiCorp should include dogwood in the riparian area planting mix and should plan to use this mix in the aspen/fir dogwood and spruce/fir coniferous forest areas. Coyote willow and narrowleaf cottonwood could be eliminated from the riparian area planting mix. To achieve the woody plant density standard for success, the number of transplants should be increased.
  2. The application needs to include the woody plant density standards for success obtained in consultation with the Division of Wildlife Resources. These standards are 900 and 3000 woody plants per acre for mountain brush/salina wild rye and aspen/fir/dogwood (including spruce/fir coniferous forest) respectively.

R645-301-411  
R645-301-412

**Land Use Environmental Description  
Land Use Reclamation Plan**

The primary land uses in Rilda Canyon are wildlife habitat, recreation, and grazing. These will continue during operation of the facilities and following final reclamation.

The Rilda Canyon facilities are located on Manti LaSal National Forest lands. All public uses consistent with the Forest Land Resource Management Plan will remain available during the operation and following reclamation of the facilities.

The application does not include new cultural or archaeological resources information. The current mining and reclamation plan includes an archaeological survey that included part of Rilda Canyon as part of the survey area, but no sites were located. It is anticipated that the Forest Service will do more cultural resources survey work. If there are any positive results, PacifiCorp would need to include them in the plan.

**Deficiency:**

1. Cultural and archaeological resources information presently in the plan is adequate, but any sites found by the Forest Service would need to be included in the plan. Land use information is also considered to be adequate.

No  
COMMENT  
REQUIRED

**R645-301-521.163; R645-301-521.170**

**Permit Area Maps**

**Deficiency:**

- 10
1. The disturbed area must include the access road from the facilities pad area to the permit area boundary. The reclamation cost estimate may also need to be revised to reflect the cost of reclaiming the road.

**R645-301-534.130; R645-301-553.130**

**Slope Stability**

**Deficiency:**

- 11
1. The submittal contains no slope stability analysis of the operational road slopes or of the reclaimed slopes. Both must display a stability safety factor of at least 1.3.

**R645-301-542.200**

**Backfilling and Grading**

**Deficiency:**

- 12
1. The submittal contains no mass balance analysis to show how the volumes of 17,000 cu yds and 10,000 cu yds on page 3-92 were calculated. There is no demonstration that the 10,000 cu yds which, according to page 3-92, are to be used in final reclamation of the pad, will even be enough.

**R645-301-542.800**

**Reclamation Cost Estimate**

**Deficiency:**

- 13
1. The submittal contains no documentation of the reclamation costs or time estimates on pages 4-65.1 and 4-65.2. It cannot be determined where these estimates came from, what they are based on, or how they were calculated.

R645-301-700

## Hydrology

### Analysis:

14 — PacifiCorp proposes that the water from the pad area in Rilda Canyon will be routed through a sediment trap into sumps within the mine. This would eliminate the need for any additional sediment control measures. The Division may allow discharges of water into an underground mine provided the four criteria of R645-301-731.511 are met. PacifiCorp has not shown that discharging water into the mine would minimize the disturbance to the hydrologic balance on the permit area (R645-301-731.511.1), nor that the discharged water would be of a known quality which will meet the effluent limitations of R645-301-751 (R645-301-731.511.3) on pH and total suspended solids. The discharge into the mine must also be approved by MSHA. (There is a concern that the depth of the hydrologic barrier may not be maintainable when water is sparse which would result in a "short-circuit" in the ventilation system.) The design storm flow into the mine would be 0.74 cfs and 0.07 acre-feet.

The plan for development of Rilda Canyon shows that some facilities and the topsoil pile would be located within the 100 foot stream buffer zone. This is permissible with the approval of the Division if the conditions in R645-301-731.610 are met. PacifiCorp has not provided information showing that operations within the stream buffer zone will not adversely effect water quality or quantity or other environmental resources. The steep terrain in the permit area causes concern because revegetation will be difficult resulting in a high potential for increased sediment in the stream. The Left Fork of Rilda Creek is an intermittent stream by definition because it has a drainage area greater than one square mile.

PacifiCorp proposes to put silt fences and straw bales around the toe of the topsoil pile as an alternate sediment control measure. The location of the sediment control measure is unclear. PacifiCorp should clarify whether the silt fence will surround the entire pile or be located only in certain area around the pile (R645-301-742.110). Silt fences and straw bales, in this case, act as sediment control rather than erosion control as stated in the proposal on page 3-92 of the proposal.

PacifiCorp plans to use the road to the surface facilities in Rilda Canyon on a limited basis. "Vehicular use of the road will only occur in emergency situations" (page 3-91 of proposal). In designing a road that matches the use, culverts may not be necessary and an appropriate drainage system can be achieved with water bars or other low maintenance measure. PacifiCorp should investigate and design a road drainage system that will incorporate the appropriate limits for surface drainage control that is appropriate for the

planned use (R645-301-534.200 and 742.411).

Upon reclamation, PacifiCorp has designed riprap channels to be constructed in the reaches of the stream culverted during the operational phase. The channel depth and riprap size were designed using the average reach gradient (upper elevation minus lower elevation divided by the horizontal length) of each reclaimed channel. These designs did not account for drastic breaks in channel slopes that are in both reclaimed channels. This may result in under designed riprap size and flow depths.

**Deficiencies:**

15

1. PacifiCorp has not shown that discharging water into the mine would minimize the disturbance to the hydrologic balance on the permit area (R645-301-731.511.1), nor that the discharged water would be of a known quality which will meet the effluent limitations of R645-301-751 (R645-301-731.511.3) on pH and total suspended solids.

16

2. PacifiCorp has not provided information showing that operations within the stream buffer zone will not contribute to the violation of applicable Utah and federal water quality standards and will not adversely effect water quality or quantity or other environmental resources.

17

3. PacifiCorp should clarify whether the silt fence and/or straw bales will surround the entire topsoil pile or partially encompass the pile (R645-301-742.110).

18

4. PacifiCorp should investigate and design a road drainage system that will incorporate the appropriate limits for surface drainage control that is appropriate for the planned use (R645-301-534.200 and 742.411).

# Application for Permit Change

## Detailed Schedule of Changes to the Permit

Title of Change:  <div style="font-family: cursive; font-size: 1.2em; padding-left: 20px;">RILDA CANYON SURFACE FACILITIES - UPDATE</div>	Permit Number: <i>ACT10151018</i> Mine: <i>DEER CREEK</i> Permittee: <i>PACIFICORP</i>
---	--

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit change. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the exiting mining and reclamation plan. Include page, section and drawing numbers as part of the description.

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>PAGES 2-173.1, 2-173.3, 2-173.8, 2-173.9, 2-173.10, 2-173.16, 2-173.17,</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>2-173.21, 2-173.28, 2-173.31, 2-173.35 THROUGH 2-173.47</i>
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>Pgs. 2-173.48 &amp; 2-173.49</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>Pgs. 2-210.6, 2-210.7, 3-39, 3-42.1, 3-90, 3-91, 3-92, 3-93, 3-94,</i>
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>Pgs. 3-94.1, 3-94.2, 3-95 THROUGH 3-110, 3-111 THROUGH 3-114</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>Pgs. 4-53, 4-54, 4-54.1 THROUGH 4-54.3</i>
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>Pgs. 4-54.4 THROUGH 4-54.13</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>Pgs. 4-65.1, 4-65.2, 4-65.3</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>VOL. 3, APPENDIX VII, SURFACE RUNOFF CONTROL PLAN (HAL PPT. FEB. 1995)</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>DWG. CE-10885-EM, PACKET 2-15A</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>DWG. CE-10886-EM, " 2-17A</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>" CE-10883-EM, " 3-9A</i>
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>" CE-10890-EM, " 3-9B</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>" CE-10884-EM, " 4-1A</i>
<input type="checkbox"/> ADD	<input checked="" type="checkbox"/> REPLACE	<input checked="" type="checkbox"/> REMOVE	<i>" CE-10853-EM, SHEETS 1 AND 2, PACKET 4-4A</i>
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	<i>" CE-10891-EM, SHEETS 1, 2 AND 3, " 4-4A.</i>
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

# APPLICATION FOR PERMIT CHANGE

Title of Change:

*RILDA CANYON SURFACE FACILITIES - UPDATE*

Permit Number: *ACT10151018*

Mine: *DEER CREEK*

Permittee: *PACIFICORP*

Description, include reason for change and timing required to implement:

*APPLICATION TO CONSTRUCT FACILITY PAD AND ACCESS ROAD TO PROVIDE SUPPORT FOR THE DEER CREEK MINE.*

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease.                     |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 2. Change in the size of the Disturbed Area? <i>2.01</i> acres <input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 3. Will permit change include operations outside the Cumulative Hydrologic Impact Area?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 4. Will permit change include operations in hydrologic basins other than currently approved?   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 5. Does permit change result from cancellation, reduction or increase of insurance or reclamation bond?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 6. Does permit change require or include public notice publication?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 7. Permit change as a result of a Violation? Violation #   |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 8. Permit change as a result of a Division Order? D.O.#  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 9. Permit change as a result of other laws or regulations? Explain:  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 10. Does permit change require or include ownership, control, right-of-entry, or compliance information?                                       |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 11. Does the permit change affect the surface landowner or change the post mining land use?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 12. Does permit change require or include collection and reporting of any baseline information?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 13. Could the permit change have any effect on wildlife or vegetation outside the current disturbed area?                                      |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 14. Does permit change require or include soil removal, storage or placement?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 15. Does permit change require or include vegetation monitoring, removal or revegetation activities?   |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 16. Does permit change require or include construction, modification, or removal of surface facilities?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 17. Does permit change require or include water monitoring, sediment or drainage control measures?   |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 18. Does permit change require or include certified designs, maps, or calculations?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 19. Does permit change require or include underground design or mine sequence and timing?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 20. Does permit change require or include subsidence control or monitoring?  |
| <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | 21. Have reclamation costs for bonding been provided or revised for any change in the reclamation plan?  |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 22. Is permit change within 100 feet of a public road or perennial stream or 500 feet of an occupied dwelling?                                 |
| <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | 23. Is this permit change coal exploration activity <input type="checkbox"/> inside <input type="checkbox"/> outside of the permit area?       |

Attach 3 complete copies of proposed permit change as it would be incorporated into the Mining and Reclamation Plan.

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.

*Val Payne*  
Signed - Name - Position - Date  
*Val Payne Sr. Env. Engineer 6/16/95*

Received by Oil, Gas & Mining

Subscribed and sworn to before me this *16<sup>th</sup>* day of *June*, 19*95*.

*Deborah J. Adams*  
Notary Public

My Commission Expires: *10-13*, 19*96*  
A state: *Utah*  
COUNTY OF *Emery*



Notary Public  
BARBARA J. ADAMS  
15 North Main  
Huntington, Utah 84503  
My Commission Expires  
October 13, 1996  
State of Utah

ASSIGNED PERMIT CHANGE NUMBER