

## CHRONOLOGY OF NORTH RILDA CANYON PORTAL FACILITIES

- + July 1997, PacifiCorp received approval to expand its mining operations to include the North Rilda Area.
- + PacifiCorp acquired the Mill Fork Lease and entered into a COAL MINING LEASE AND AGREEMENT with the State of Utah on April 1, 1999. The coal tract as described in the lease contains approximately 5,562.82 acres, more or less. With the leasing of the Mill Fork Tract in 1999, PacifiCorp controls through ownership and leasing certain fee coal lands together with assigned federal coal leases nearly 30,000 acres of contiguous minable property located in Emery County, Utah. PacifiCorp submitted an application to include the Mill Fork Lease within the Deer Creek Mine permit in November 2001. The application was approved on March 5, 2003. This expansion involved increasing the acreage of the Deer Creek permit by 5,562.82 acres. Because of the geographic location, the proposed new area of expansion is referred to as the "Mill Fork Permit Area", refer to Volume 12.
- + Mine plans were developed based on results of the coal exploration programs to access to the Mill Fork lease through a set of main entries developed in the Hiawatha seam driven in a westerly direction along the southern most lease boundary.
- + PacifiCorp evaluated long term options to improve overall underground transportation and economic considerations.
  - Options investigated included:
    - Acquisition of Crandall Canyon Mine
    - New portal facilities in Mill Fork Canyon
    - New portal facilities in Rilda Canyon
      - In-seam horizontal drilling was conducted to evaluate potential location of portal facilities.
  - As a result of extensive investigation, PacifiCorp selected Rilda Canyon as the best option based on the following:
    - Environmental Considerations
    - Facilities are located in an area previously disturbed by mining
    - Surface facilities are designed to accommodate men and materials only. Coal mined from the Hiawatha (lower) and Blind Canyon (upper) seams will continue to be shipped through the existing Deer Creek mine workings to the portal in Deer Creek Canyon. From this point, the coal will be transported to the Huntington Power Plant coal storage area via the existing overland beltline. Only surplus production beyond the Huntington Plant needs will be trucked on the highway from the plant.
    - Engineering Considerations
    - Facilities designed to minimize surface disturbance (only 13.1 acres of which 4.4 acres have been previously disturbed [roads and historical mining])

File in:

Confidential

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0150018 Incoming  
03312005 For additional information

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## CHRONOLOGY OF NORTH RILDA CANYON PORTAL FACILITIES

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- Utilization of existing infrastructures (roads, powerline)
- + PacifiCorp submitted an application (Volume 11) on November 4, 2003 for a 10.2-acre facilities pad in Rilda Canyon for miners and materials access. The facilities were proposed in an area disturbed by previous mining operations. This application was withdrawn, largely because of anticipated problems in getting permits to place 1,500 feet of Rilda Creek into a large diameter culvert.
- + On September 2, 2004, the PacifiCorp submitted a revised application for the facilities pad area in a new location, approximately ½ mile farther up the canyon, near the intersection of the Right and Left forks of Rilda Canyon. Relocation of the facilities will not require culverting of the Rilda Creek.

The proposed North Rilda Portal Facilities consisted of two separate areas. The main facilities will consist of 9 acres, with an additional 3.13 acres (outside the current permit boundary) for soil and subsoil storage down the canyon, a total disturbed area of 12.13 acres. This will bring the total disturbed area for Rilda Canyon, including the Left Fork fan area, to 14.46 acres and total disturbed area for the Deer Creek Mine to 96.47 acres: the total permit area remains unchanged at 22,769.06 acres.

- + The Division responded with the Administrative Completeness Review on October 11, 2004 and followed up with the Technical Analysis document on October 19, 2004. The Division determined the application incomplete during there review and required Energy West to supply more detailed information.
- + During permit review meetings held on November 1-2, 2004, regulatory agencies requested that PacifiCorp review the current application and relocate the soil storage piles within the permit boundary utilizing areas previously disturbed by historic mining.
- + On December 6, 2004, to simplify revisions to Volume 11: Deer Creek Mine North Rilda Portal Facilities, PacifiCorp requested that the September 2, 2004 amendment be withdrawn from public record.
- + PacifiCorp, on December 21, 2004, re-submitted a completely revised application (Volume 11) for the Rilda Canyon Facilities with topsoil and subsoil piles located within the permit area.
- + On March 1, 2005, PacifiCorp received a list of deficiencies related to December 21, 2004 submitted, which included U.S. Forest Service comments. Response to the deficiencies due by April 1, 2005.

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The following responses to deficiencies are formatted as found in the technical analysis document. They are broken down into logical section headings similar to the R645 regulations. In each section, the regulation number along with the associated deficiency is followed by the permittee's italicized response.

**R645-301-113**, The NOV information found in Appendix D of the Legal and Financial Volume was last revised April 18, 2003; the Permittee must update Violation Information to cover the five years preceding the date of submission of this proposed amendment [JDS].

*The Supplemental Volume, Legal and Financial Information has been amended to completely update the information within for the Cottonwood, Deer Creek, Des Bee Dove, and Trail Mountain mines. Updated information includes Text Section, Officer and Director listing as of November 2004 (Appendix A), Right of Entry Information; updated as a result of the recent lease relinquishment approvals by the BLM (Appendix C), NOV Information (Appendix D), Certificates of Liability; current for PacifiCorp's FY2006 which runs from April 1 through March 31 (Appendix E), and Permit Boundary Descriptions; descriptions changed as a result of the lease relinquishments (Appendix G). This permit action was submitted on March 31, 2005 and is pending Division approval.*

**R645-301-121.200**, The Permittee C/015/018e must change the last paragraph on page 42 to read all asphalt material will be removed and taken to a landfill. (No asphalt may be disposed of on National Forest System land) [WHW].

*Changes have been made concerning issues involving the handling of asphalt material. These changes read as follows: ~~The~~ All asphalt material from the ~~parking lot~~ disturbed area will be excavated and taken to a permitted class IV landfill.*

**R645-301-121.200**, The Permittee plans to use a USGS report (USGS Open-File Report 81-539; Division February 2003 Incoming Files Record #0009) as the baseline macroinvertebrate evaluation for Rilda facilities project. The USGS survey, however, is over 20 years old and provides an evaluation only for the macroinvertebrates at the confluence. The Permittee must clarify that the USGS data may supplement (not serve as the baseline analysis) the surveys conducted during and after 2004. [JAE]

*Text was added to clarify that the 2004 and 2005 surveys are the baseline data. These additions read as follows: In addition to the previous studies of Rilda Creek drainage, and serving as the baseline analysis, the UDWR conducted biological organism and habitat studies of Rilda Creek in the spring of 2004 (refer to Volume 11 Appendix Volume - Biology: Appendix D). (See R645-301-300 Biology, page 10 of the permit)*

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**R645-301-121.200**, The MRP states that the DWR and Cirrus 2004 reports conclude the baseline survey requirement for the Rilda facilities project. The MRP, however, also states that they will conduct two spring and two fall baseline surveys. The Permittee must make it clear throughout the MRP that they will collect two years of baseline data (second fall depends on project schedule in 2005). [JAE]

*Text was added to clarify that the baseline data will be concluded following the 2005 spring and fall surveys. These additions read as follows: This preliminary report, plus the reports that will be generated from the spring and fall 2005 surveys, marks the completion of the pre-disturbance baseline data sampling effort. (See R645-301-300 Biology, page 11 of the permit)*

**R645-301-122**, The Permittee will provide the Division with an updated copy of the R2P2 or equivalent information [WHW].

*PacifiCorp submitted R<sub>2</sub>P<sub>2</sub> request to the BLM on March 22, 2005 to include extending the 1<sup>st</sup> Right sub-mains and provide ventilation breakouts. This application was approved on March 25, 2005 (see attached approval letter).*

**R645-301-122, -123**, The Permittee must move the information about the reclamation/reconstruction of the County Road from Section R645-301-553.130 (AOC) in the application to a section such as R645-301-542 that deals with roads [WHW].

*After further discussion of the issue related to the reconstruction of the suspended portion of EC#306, it was decided to remove detailed plans and designs of a road in which Emery County has jurisdictional control. Therefore, all discussion of road reconstruction has been removed from Section R645-301-553.130.*

*In 1994, Emery County developed plans and designs to extend the road in Rilda Canyon to the right and left forks. At the completion of mining and reclamation activities, the suspended portion of EC#306 will be replaced in the same location and original design. These designs are owned by Emery County and are on file in the Road Department office in Castle Dale. Energy West has retained a copy at their office for public and agency review. Sections R645-301-526.116.1 and R645-301-526.116.2 in the Engineering Section have been amended to discuss reconstruction of the road.*

**R645-301-130**, In Volume 11, Section 721, under subheading A. 8., in the section titled Aquifer Characteristics (on page 19 of the Hydrology Section of the current submittal), the first two sentences of the second paragraph describe three sources of groundwater moving through Rilda Canyon. The sources for this important information (such as studies documented in Volume 9) must be cited or referenced [USFS, JDS].

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*Reference has been added concerning the source groundwater in Rilda Canyon. List of references was also revised. In addition, PacifiCorp has provided a copy of the Vaughn Hansen & Associates 1983 report for the Division's files.*

**R645-301-222**, The Permittee must provide the addendum to the soil survey describing the existing resources of the topsoil and subsoil storage areas [PWB].

*Volume 11 Appendix Volume - Soils Section: Appendix B has been amended to include topsoil and subsoil survey Mt. Nebo December 2004.*

**R645-301-230**, The Permittee must indicate the following in the plan:

The topsoil storage site will be moved upslope, out of the alluvial soils shown on Map 200-1, to prevent potential impacts to groundwater flow and compaction of the wet subsurface soils;

End dump trucks will not travel over the topsoil remaining in place, but will dump loads of soil at the end of the access road to the topsoil stockpile and tracked vehicles will be used to move the topsoil into the pile;

*R645-301-230 has been revised to include the following statement:*

*Location of the topsoil storage pile minimizes disturbance by utilizing previously disturbed areas associated with the Helco Mine. During the operations of the Helco Mine, this area was used as coal storage and handling area. Water monitoring well (P4, refer to map 500-3 in the Engineering Section) installed near the proposed pile indicates that the depth of the saturated alluvium is approximately twenty feet below the existing ground surface. As discussed above, this area was used as a coal storage and handling site. To prevent additional compaction of the existing soils, the pile will be constructed over a broad area with track mounted equipment. End dump trucks will haul the soil from facility area to the soil storage site. Trucks will not travel on the storage site, but will dump loads adjacent to Forest Development Road 024. Track mounted equipment will distributed the soil across the site.*

After construction, an accurate accounting of the volume of topsoil stockpiled as well as any changes to the specified dimensions of the topsoil stockpile will be provided to the Division [PWB].

*R645-301-230 has been revised to include the following statement:*

*Upon completion of the subsoil storage pile, PacifiCorp will conduct an as-built survey of the site to accurately compute the volume of soil retrieved during development of the surface facilities. All appropriate maps and text will be revised to reflect as-built conditions.*

**R645-301-232.200**, The Permittee must indicate that the soil salvaged from the proposed

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sediment pond site will be livehauled for enhancement of the LeRoy AMR site or stockpiled for reclamation of the sediment pond area (p. 30, Exp. Practice discussion) [PWB].

*R645-302-218 has been revised to include the following statement:  
Sediment Pond Area:*

*Soil salvaged from this area will be used to enhance the previously AML reclaimed area, excess soil material will be live hauled to the AML sites or segregated and stored as recommended by the qualified soil scientist monitoring the soil removal process.*

**R645-301-240**, The Permittee must:

- Reword Section R645-301-243 regarding locations of soil sampling at reclamation, i.e., because the phrase “for each of the areas to be topsoiled” does not apply to the topsoil or experimental practice storage areas it should be removed;

*R645-302-243 has been revised to include the following statement:*

*Three composite samples will be collected for each of the areas to be topsoiled: mine facility and sediment pond ~~and the soil storage site areas.~~*

- Remove the qualifying phrase “where feasible” from the commitment to replace boulders in Section R645-301-243. (Replacement of boulders is a requirement that cannot be compromised, however a percentage cover by boulders may be indicated.);

*R645-302-244 has been revised to include the following statement:*

*Various sized rocks and boulders (litter) will be randomly placed on slopes of reclaimed areas ~~where feasible or helpful~~ to control slope slippage, promote microhabitats, and provide a natural aesthetic appearance.*

*In addition, R645-302-242 has been revised to include the following statement:*

*Excess Boulders will be randomly placed on the surface similar to pre-existing conditions, estimated at approximately five percent coverage.*

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- Indicate that tracked vehicles rather than rubber tired equipment will be used for topsoil redistribution. Tracked vehicles are required because they produce less compaction [PWB].

*R645-302-244 has been revised to include the following statement:*

*Soil will be removed from the soil storage sites until excavation encounters the indicator fabric placed during development of the site. Topsoil materials that were previously stockpiled will be redistributed in a uniform thickness on the scarified, postmining regraded subsoil surface. The material will be hauled to the regraded area by dump truck. Track-mounted equipment ~~Track-hoes, rubber tired backhoes, dozers and front-end loaders~~ will be used to recontour the disturbed area.*

**645-301-322, -301-333, -301-342, -301-358,**

### **Protection and Enhancement Plan**

As noted in the application, the pre-disturbed areas were reclaimed in 1988. The areas were topsoiled, re-contoured, and seeded. Because the vegetation is established and the areas are considered critical winter habitat for deer and elk there would not be a reduction in the disturbed area footprint. However, 4.4 acres or 33.6% of the proposed disturbed 13.1 acres would be considered pre-disturbed reclaimed land.

- The Permittee needs to remove or revise this section of the application because this reduced disturbed footprint method does not apply.

*A new mitigation table (Table 300-5, See R645-301-300 Biology, page 17 of the permit) was added to the permit. Additional commitments are included. The permittee feels that the commitment listed above is part of an effective protection and enhancement plan. A site visit have been offered to DOGM to back the commitment.*

- Map 500-1 needs to be revised to reflect the locations and acreages of the 4.4 acres of pre-disturbed areas.

*A note in the legend was added to map 500-1, sheet 1 of 3 stating: PRE-DISTURBED AREA (AML RECLAIMED 1988) OF THE 13.1 TOTAL DISTURBED ACRES, 4.4 ACRES ARE ON LAND PRE-DISTURBED BY HISTORICAL MINE SITES. THE PRE-DISTURBED LAND IS 33.6% OF THE TOTAL DISTURBED AT THE RILDA CANYON PORTAL FACILITIES.*

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Wildlife mitigation commitments for Big Game include:

1. For the Leroy mine area, buried coal removal and landscape enhancement. Because the site was reclaimed by the Abandoned Mine Lands section of the Division of Oil Gas and Mining in 1988 it would not be considered a wildlife mitigation commitment. The removal of the buried coal will merely provide a proposed location for the construction of the sediment pond.
2. For the AML areas outside the proposed disturbed area, the permittee proposes to cooperate with the AML and USFS to reclaim and enhance the Leroy Mine area. The AML section completed this project in 1988. According the AML staff there are no future plans for additional enhancement work. This would not be considered a wildlife mitigation commitment
3. For the aspen regeneration in Meetinghouse Canyon, the permittee has proposed to cooperate with DWR in a timber harvest and aspen regeneration on 200 acres of private land.

Items 1, 2 and 3 would not be considered wildlife mitigation or enhancement/protection commitments.

*A new mitigation table (Table 300-5) was added to the permit. Additional commitments are included. The permittee feels that the commitments listed above are effective mitigation measures. A site visit have been offered to DOGM to back the commitments. (See R645-301-300 Biology, page 17 of the permit to see the table) Additional discussions of the mitigation is scheduled on April 6<sup>th</sup> with all concerned agencies and Energy West.*

- The permittee needs to include in the application a detailed plan for the regeneration of aspen on the 200 acres of private land.

*In discussions with Terry Nelson (USFS) and Leroy Mead (DWR) a time table and work scope of the project has not been considered. Participation in the project, by Energy West Mining will be determined when the government agencies and Energy West agree on the mitigation.*

- This section of the application needs to be revised to include a protection and enhancement plan that describes how the impacts to big game species from the development of the surface facilities and increased traffic along the road will be mitigated.

*A list of 15 protection measures are listed in the permit. Measure 14 was added.*

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*reads: 14. Reclamation activities will not take place between December 1<sup>st</sup> and April 15<sup>th</sup>, an exclusionary time for wintering and calving periods. (See R645-301-300 Biology, page 17 of the permit)*

According to the USFS, the proposed surface disturbance will be located in the area that was to be set aside as big game mitigation for the development of the fan portal facilities in the left fork of Rilda Canyon. That being the case the permittee would also need to mitigate for the previous portal development. Any enhancement plan must include at least the overseeing agency or other group, general objective and location of the project, date of expected implementation and completion, and required reporting. Suggested mitigation projects for Big Game species include:

*The mitigation commitments in the permit are for the Rilda Canyon proposed disturbance and for the existing Rilda Canyon fan. Additional discussions of the mitigation is scheduled on April 6<sup>th</sup> with all concerned agencies and Energy West. Mitigation protection measures 12 through 14 pertains to The Rilda Canyon Fan disturbance. (See R645-301-300 Biology, page 17 of the permit)*

- The purchase of SITLA properties in Rilda Canyon;
- Funds provided to the USFS for prescribed burning;
- The purchase of properties in Mill Fork canyon;
- Participation with DWR on mule deer and elk tracking programs;
- Implementation of an employee awareness program that addresses highway deer kill and the impacts to raptors;
- Participation with USFS on a ponderosa improvement project for the flammulated owl;
- Participation with USFS on sagebrush improvement for mule deer, sage grouse, Brewers sparrow, and sage sparrow.
- Funding towards noxious weed program within Rilda and lower Huntington Canyons and;
- The protection of property from further mining activities in Meetinghouse Canyon.

*A new mitigation table (Table 300-5) was added to the permit. Additional commitments are included. The mitigation commitments are for the Rilda Canyon proposed disturbance, including the existing Rilda Canyon fan. (See R645-301-300 Biology, page 17 of the permit) Additional discussions of the mitigation is scheduled on April 6<sup>th</sup> with all concerned agencies and Energy West.*

For protection of Big Game species the Permittee commits to conducting construction activities during months that would minimize impacts to breeding and birthing activities.

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- The plan needs to specify that construction activities would not interfere with the activities of deer and elk during periods of high stress, such as when the animals are utilizing the same area from early winter through late spring.
- Exclusionary periods (Vol. 11, p. 300-10) for elk and deer need to specify that the wintering period is from November 1 through May 15, and calving period is from May 1 through May 15.

*To be consistent with other permit requirements, the exclusionary period is December 1 through April 15. The following text was added: 14. Reclamation activities will not take place between December 1<sup>st</sup> and April 15<sup>th</sup>, an exclusionary time for wintering and calving periods. (See R645-301-300 Biology, page 17 of the permit) 7. Reclamation activities will not take place between December 1<sup>st</sup> and April 15<sup>th</sup>, an exclusionary time for wintering and calving periods. (See R645-301-300 Biology, page 26 of the permit)*

#### **Wetlands and Habitats of Unusually High Value for Fish and Wildlife**

The proposed disturbed area will be located in Critical Deer and Elk winter range including some riparian areas. These would be considered habitats of unusually high value for these species of wildlife. The proposed disturbed area will potentially impact 13.1 acres of deer and elk critical winter range. According to estimates from Terry Nelson, (Wildlife Biologist for the Manti La-Sal National Forest), approximately 1,148 acres of critical deer and elk winter range would be potentially impacted by the development of the surface facilities and increased traffic along the road. The estimate is based on a 0.5-mile corridor of displacement along the road and around the proposed disturbed area that is scaled down using topographic features. The USFS typically requires 3 acres of mitigation for each acre impacted. The application for the proposed Rilda Canyon development area has not addressed this section of the regulations.

- The Permittee needs to address this section of the regulations.
- The application needs to describe how these areas will be protected. Portions of the revised information in the previous section (Protection and Enhancement Plan) may also be used to address this section of the regulations [JCH].

*A new mitigation table (Table 300-5) was added to the permit. Additional commitments are included that meet the 3:1 acre requirement. (See R645-301-300 Biology, page 17 of the permit) Additional discussions of the mitigation is scheduled on April 6<sup>th</sup> with all concerned agencies and Energy West.*

**R645-301-322.100, -322.200, The Permittee must:**

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- Conduct the spring and fall aquatic post-disturbance surveys the first spring and fall after construction begins for the Rilda facilities site [JAE].
- Conduct the spring macroinvertebrate every three years after construction begins for the Rilda facilities site. The Permittee will provide all reports in Annual Reports. All surveyors must use the same protocol and sampling locations provided in the 2004 Walker document [JAE].

*The following text was changed and added: Baseline data for aquatic species will include two spring and one fall sampling (a second fall sample, depending on construction timing) surveys prior to facilities construction. Post construction surveys will be conducted in the spring and fall, followed by a spring survey once every 53 years, using the same protocol and sampling sites as the 2004 surveys. (See R645-301-300 Biology, page 19 of the permit)*

**R645-301-333**, The Permittee must provide a plan to enhance, protect, or maintain the quality of the large cavern (adit) throughout the operation and reclamation phases, such as providing a sign for construction workers to avoid areas beyond markers [JAE].

*The following text was added: 15. A warning sign will be installed at the western end of subsoil pile to inform mining personnel/public of the large cavern (Leroy Mine Portals). Awareness will protect this potential bat habitat area. (See R645-301-300 Biology, page 17 of the permit)*

**R645-301-323**, Page 16 paragraph 3 references the big game species maps. The maps are incorrectly noted as 300-2, 3 and 4. The reference needs to be revised to indicate that the deer, elk and moose habitat are located on Maps 300-3, 4, and 5. The maps need to include the size and location of the proposed 13.1-acre disturbance [JCH, JAE].

*Map numbering were changed as indicated and the 13.1 acre disturbance added.*

**R645-301-333, -342, -358**, The application needs to include an exclusionary period during the reclamation of the site. The plan must specify that reclamation activities would not interfere with the activities of deer and elk during periods of high stress, such as when the animals are utilizing the area from early winter through late spring. Exclusionary periods for elk and deer must specify that the wintering period is from November 1 through May 15, and calving period is from May 1 through May 15 [JCH, JAE].

*To be consistent with other permit requirements, the exclusionary period is December 1 through April 15. The following text was added: 14. Reclamation activities will not take place between December 1<sup>st</sup> and April 15<sup>th</sup>, an exclusionary time for wintering and calving periods. (See R645-301-300 Biology, page 17 of the permit) 7. Reclamation activities will not take place between*

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*December 1<sup>st</sup> and April 15<sup>th</sup>, an exclusionary time for wintering and calving periods. (See R645-301-300 Biology, page 26 of the permit)*

**R645-301-333**, The Permittee must update all equations and justifications with supporting documentation leading to the overall sum of water depletions or additions. This update must include actual usage for all of the Deer Creek mining operations as well as the estimated usage for mining operations from the proposed Rilda facilities project [JAE].

*PacifiCorp provided an in-depth analysis related water depletions in Volume 12 R645-301-333. Information provided in Volume 12 is applicable. As outlined in Volume 11, two separate drainage systems are provided at the Rilda Canyon portal facility site and are classified as "undisturbed" and "disturbed" collection systems. The "undisturbed" system collects overland runoff water above the portal site and from side slopes adjacent to the site and conveys it past the disturbed area into the natural channel of Rilda Canyon Creek. The "disturbed" collection system collects runoff from portal area, parking lots, storage areas and bathhouse area and conveys it to the runoff collection tank for discharge into the mine. The collection tank will be constructed to isolate runoff/washdown water from gray water production. The facilities will be designed to isolate domestic waste water from washdown/gray water. Domestic waste "black water" will pass through to a holding tank and be transported to an approved treatment facility. The disturbed runoff and gray water will report to a 26,000 gallon tank which then be pumped to an abandoned area of the mine (for additional detail related to the runoff collection tank refer to R645-301-530). A directional drill hole will be developed from the runoff collection tank through the Star Point Sandstone intercepting the abandoned workings of 2<sup>nd</sup> Right. From there, the water will flow down dip to the east to a series of abandoned longwall panels in the Hiawatha coal seam down gradient of the Rilda Canyon Springs.*

**R645-301-333.300**, The Permittee commits to participate with USFS, UDWR and private property land owners (CW Mining and PacifiCorp) to rehabilitate Rilda Creek below Rilda Canyon Springs. The Permittee must provide more specifics of the project, such as proposed dates, overseeing agencies, and points on how the Permittee will participate (monetary, man power, etc.) [JAE].

*In discussions with Terry Nelson (USFS) and Leroy Mead (DWR) a time table and work scope of the project has not been considered. Participation in the project, by Energy West Mining will be determined when the government agencies and Energy West agree on the mitigation.*

**R645-301-341.210**, The Permittee must commit to use Table 300-9 seed mix in the reclaimed topsoil stockpile area [PWB].

*The seedmix table numbering have changed because of the addition of the Rilda Canyon Mitigation Table. The White Fir/Aspen seedmix is now found in Table 300-10. The following*

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*text was changed and added: The topsoil storage area will be with the White Fir/Aspen seedmix (Table 300-10) and subsoil storage area will be seeded with the sagebrush/grass seedmix Pinyon-Juniper/Mountain Brush seedmix (Table 300-8) for interim and final vegetation. (See R645-301-300 Biology, Page 24 of the permit)*

R645-301-356, The Permittee must provide a NRCS 2004 evaluation of productivity and range condition for this site. Illustrate that surveyors conducted or will conduct the vegetation survey and NRCS evaluation within a normal precipitation year prior to disturbance. If the Division authorizes the use of baseline, the Permittee must bring the cover to at least 50% with a species composition that is comparable to proposed redisturbed area. The Permittee must address these standards in section 301-350 (p. 300-26) [JAE].

*Following a phone conversation with NRCS (Dean Stacy), the following text was added: The NRCS condition rating is 3 levels (Good, Fair, Poor), with sub-ratings of high and low. Though precipitation totals for the year were slightly below normal, the conditions of the reference areas were in the mid range (fair) condition. (See R645-301-300 Biology, Page 3 of the permit)*

*Concerning the redisturbed reclamation standards, the following text was added: The vegetation success standard is met when the total vegetation cover percent meets the 2004 sample data in the Mt. Nebo Scientific report for the AML site and when the vegetation cover is at least 50% of a species composition that is comparable to the 2004 sample data (refer to Volume 11 Appendix Volume - Biology: Appendix A). (See R645-301-300 Biology, Page 28 of the permit)*

**R645-301-411.144**, The Permittee must update references of historic resource surveys to include the Senulis 2004 report [JAE].

*PacifiCorp has agreed with the Division to supply a "Private and Confidential" volume by June 1, 2005 to include; cultural surveys and raptor information for all of PacifiCorp mine permits.*

**R645-301-422**, The Permittee must include either a copy of the Division of Air Quality's approval order (DAQE-AN0239003-02) or equivalent information in the MRP. Without the information, the Division cannot complete their review of the air pollution control plan [WHW].

*After discussing the deficiency with PacifiCorp air quality personnel, the following text was added: Prior to construction, the current AO will be revised, submitted and approved by the Division of Air Quality. Upon approval, a copy of the permit will be submitted to the Division. (See R645-301-400 Land Use and Air Quality, Page 4 of the permit)*

**R645-301-512.200**, The Permittee must have the road designs in Section R645-301-553.130 certified by a licensed registered professional engineer [WHW].

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*Refer to discussion in deficiency R645-301-122, -123.*

**R645-301-521.100, -521.110, -521.140**, The Permittee must include one mine map that shows all mined and proposed mining areas for the Hiawatha Seam. The map needs to include the rock tunnels associated with the North Rilda Portal Facilities [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-521.120**, The Permittee must label all manmade features on Map 500-1 (such as the spring collection system and underground pipes) and increase the font size so all lettering is legible [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-521.120, -141**, The Permittee must submit a pre-existing surface configuration map at a scale of 1 inch equals 100 feet; the map must also show the location of each cross-section and all existing manmade features such as pipelines. Because of the valuable information on Map 500-1, the Division recommends that the Permittee submit an additional map and not replace Map 500-1 [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-521.150, -521.190**, The Permittee must provide the Division with maps and cross sections that show the pre-disturbed areas at a scale of 1-inch equals 100 feet. The cross sections must cover the entire disturbed area on intervals of not less than one every 50 feet. The Division needs the predisturbance, operational, and reclamation maps at the same scale so that the Division can overlay the maps [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-521.150, -521.190**, The Permittee must include operational maps that show the location of cross sections at a scale of 1 inch equals 100 feet. The cross sections need to be at 50 foot intervals for all significant areas such as the main mine area, the topsoil storage area, the subsoil area, and the topsoil storage area by the sediment pond [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-521.180, -521.190**, The Permittee must use consistent names for all structures in the physical facilities list (Section 521.180), the physical facilities map (Map 500-3), and the bond calculations. Examples include but are not limited to: collection tanks or tank, parking lots, underground vehicle parking garage or parking garage, mine ventilation fan or fan,

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trans or substation, water tank or culinary water tank, septic tank or 20,000-gallon black water tank. All items shown on the Map 500-3 must be listed in Section 521.180 and vice versa. Examples include but are not limited to powerlines other than the 25 KV line, generators, non-coal waste, sand storage, rock waste, gravel storage, covered storage, retaining structures, rock dust silo, oil shed, fuel dock, lift station, pump station and generator [WHW].

*A consistent nomenclature for all structures have been incorporated on the maps and text. However, since the facilities have not yet been designed by an engineering firm the bond calculations that were submitted with the last submittal has been removed. When it is time to include bond calculations, all information will be consistent.*

**R645-301-521.190**, The Permittee must show the location of the snow storage areas on Map 500-3. The Division needs that information in order to evaluate the snow storage plan. The Permittee must describe what areas will have asphalt or concrete surfaces and what material will be stored on site (the Division and USFS are interested in the potential for ground-water contamination), and describe the source of the culinary water supply [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-527.200**, The Permittee must provide designs for all roads such as the access road to the topsoil storage pile and the subsoil storage area [WHW].

*A primary road has been discussed within the text and included on Map 500-3. A typical design is also included on the map. As stated in the text, an engineering firm will be contracted to design the surface facilities. This firm will also be responsible for design of the parking lot pad and access road to the bathhouse/office/warehouse facility. As these facilities are designed, they will be included in the permit.*

*Roads into the topsoil and subsoil storage areas: There is an existing Forest Service road into the topsoil storage area, FDR024. PacifiCorp will need to acquire an encroachment permit to utilize this road as well as a permit to utilize Emery County road 306. These roads are not included within the disturbed area of the mine and therefore, do not require a design.*

*The access into the subsoil storage is only temporary. Upon completion of material hauling the access will be reclaimed and seeded. Because of the temporary status of the access, no design is required.*

**R645-301-527.200**, The Permittee must show the location of County Road 306 on Figure 500-4 for each phase of mining including premining, operation and reclamation [WHW].

*The location of Emery County road 306 has been denoted on Map 500-4. Also included is the*

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*location of the disturbed boundary.*

**R645-301-528**, The Permittee must include in the narrative information about the plans for temporary storage of coal mine waste at the North Rilda Portal Facility and that they will only place coal mine waste in the waste rock bunker labeled on Map 500-3 [WHW].

*The narrative has been amended to reflect the following found in Engineering, R645-301-528, Handling and Disposal of Coal, Overburden, Excess Spoil and Coal Mine Waste:*

*“During operations in Rilda Canyon, very limited amounts of coal mine waste may be transported through the Rilda Canyon portals. Most coal mine wastes will be removed through the Deer Creek portals. The Deer Creek MRP includes a narrative explaining the construction, modification, use, maintenance, and removal of coal, overburden, excess spoil, and coal mine waste through the Deer Creek portals. Coal mine wastes may be temporarily stored ~~within the disturbed area~~ in a controlled manner in a designated portion of the disturbed area as shown on Map 500-3 ~~the Rilda Canyon Portal Facilities~~ before being transported to the Deer Creek waste rock site. The waste will be stored at ~~the~~ this temporary storage location and hauled as necessary (Refer to the surface facilities Map 500-3 and facility description in R645-301-521.180)”.*

**R645-301-537**, The Permittee must state how the final grading of the excess 5,809 yd<sup>3</sup> of subsoil will affect the experimental practice [PWB].

*Actually, the excess material was estimated at 6,010.19 cubic yards. This is an estimate made by calculating the amount of fill needed to complete the final reclamation topography. This result is then subtracted from the cut and fill estimates that were calculated for the construction of the facilities pad. Typically, a margin of error of 5% to 10% is allowed. The difference in this case is 5.13%.*

*Since an exact amount of excess is unknown it was decided that plans to enhance the Leroy Mine should be struck from the permit application. It is stated in the Engineering Section in Section R645-301-553: Backfilling and Grading that “Excess soil material will be used to create mounds, extrusions, etc. on the reclaimed surface.*

**R645-301-537.100**, The Permittee must classify each road in the disturbed area as primary or secondary. Those include access roads to the topsoil storage area and the subsoil storage area [WHW].

*A narrative has been included in R645-301-527 to include road classification within the mine surface facilities area. One primary road has been identified as the access road from the mine gate to the bathhouse/office/warehouse facility. The length of the proposed road is approximately 950 feet. It is anticipated that the road will be constructed identical to the parking*

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*area. However, all plans developed thus far are conceptual. The surface facilities will be designed and detailed by an engineering consulting firm contracted specifically for that purpose. A conceptual design of the road foundation has been illustrated on Map 500-3.*

**R645-301-542.300, -532.310**, The Permittee must modify cross-section A-A' on Map 500-4, sheet 5 of 5, to show how the reclaimed slope will tie into the undisturbed slope [WHW]].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-542.320**, The Permittee must identify each reclamation facility or feature, such as trailheads and public parking lots, on Map 500-5. In addition, the Permittee must place a legend on Map 500-5 that identifies line types [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-542.310, -533.130**, The Permittee must have a licensed registered professional engineer certify that the reclamation designs will meet the minimum safety factor requirement of 1.3 and that the slopes will be at an angle that is less than the angle-of-repose [WHW].

*A certified professional engineer has stamped the AMEC Report in Volume 11 Appendix Volume, Engineering: Appendix F. This report discusses the design of fill structures which includes safety factor calculations. All slopes constructed within the disturbed area of the Rilda Canyon portal facilities will be 2 horizontal to 1 vertical or less as stated in R645-301-553.130.*

**R645-301-542.320**, The Permittee must state if the spring collection system will remain in place after final reclamation or if the spring system will be modified [WHW].

*In discussions with NEWUSSD, they have no intention of reclaiming the spring collection system. Since they are holders of the special-use-permit from the Forest Service it would be their decision to reclaim, not PacifiCorp. The spring collection system is proposed outside the disturbed area of the Rilda Canyon portal facilities so the area does not fall under the jurisdiction of the Division.*

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**R645-301-542.600**, The Permittee must include a detailed reclamation plan for each road that they will reclaim [WHW].

*There will be no road reclaimed within the disturbed area of the Rilda Canyon portal facilities area. Discussion of the replacement of Emery County road 306 is found in R645-301-526.116.2. PacifiCorp is currently working with Emery County to construct an agreement (Agreement #2) to suspend a portion of EC306 through the mine facilities area. When this agreement is finalized, it will be incorporated into Volume 11 Appendix Volume, Engineering: Appendix B.*

**R645-301-732.210, 733.200**, In most of Volume 11 it is clear that the sedimentation pond is temporary and will be removed and reclaimed when mining operations cease. Volume 11, Hydrology Appendix B, Section 3.5 describes a "temporary" pond that will be used during construction but will be replaced by a "permanent" pond for mine operation. The Permittee needs to revise Section 3.5 of Volume 11, Hydrology Appendix B so it is clear there will be no permanent impoundment or sedimentation pond at the Rilda Canyon portal facilities [JDS].

*R645-301-700 Appendix B has been revised to include the following statement:*

*It should be noted that this temporary sediment structure will be required for only a short time during the construction (approximately 1 year) until such time as the permanent sediment pond (life-of-facilities) structures are in place.*

**R645-301-733**, Reclamation of the clay liner for the sedimentation pond is discussed in Volume 11, Sections 533 and 553 but not in Volume 11, Hydrology Appendix B, which is referred to in Section 533 as the location for the pond design. For clarity and consistency, the construction and reclamation of the clay liner needs to be included in the Drainage and Sediment Control Plan, Volume 11, Hydrology Appendix B [PWB, JDS].

*R645-301-700 Appendix B has been revised to include the following statement:*

*As discussed in Section 4.1, the sediment pond will be removed during final reclamation. The clay liner will be disposed of on-site by burying at least four (4) feet below the final surface configuration.*

**R645-301-742**, In Volume 11, Hydrology Appendix B, Section 2.11, the Permittee indicates that at ASCA-4 and ASCA-5 at soil storage areas, silt fences will be removed after vegetation is established or two years. A specified time limit is not acceptable and the two-year limit must be removed from the plan. Sediment control must be designed, constructed and maintained using the best technology currently available, and if vegetation or other methods cannot be shown to be providing adequate sediment control, the silt fencing will need to be maintained [PWB, JDS].

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**R645-301-744.100**, Plans for controlling discharges at the outlet to the sedimentation pond are given in general terms in Volume 11, Hydrology Appendix B, Sections 3.1 and 3.4, but no plans were found in Volume 11 regarding discharge structures at the outlets of the undisturbed-drainage bypass culverts. The Permittee needs to include plans for structures to control discharges at the outlets of the bypass culverts in Volume 11 [JDS].

*R645-301-700 Appendix B has been revised to include the following statement:*

*Culverts with designed flows which exceed 5 ft/sec will include rap rip outlet structures designed for the specified storm event (refer to Figure 11 for culvert outlet design).*

**R645-301-751**, Because the Rilda Canyon portal facilities are on USFS land, there can be no UPDES permit and no point source discharge at this location. The sedimentation pond is designed for total containment of the 10-year, 24-hour event; however, it is designed with both a principal and an emergency spillway. Flow from these spillways will go into undisturbed diversion ditch UD-9, which empties into Rilda Creek (Volume 11, Hydrology Appendix B, Sections 3-1 b and 3.4 g; Maps 700-1 and 700-3). The plan needs to address the possibility that discharges from the sedimentation pond would violate Utah and federal water quality laws and regulations and effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR Part 434 [JDS].

*R645-301-751 has been revised to include the following statement:*

*To minimize disturbance to the hydrologic balance of the Rilda Canyon drainage system, PacifiCorp proposes to construct the Rilda Canyon Portal Facilities with a runoff water collection system located east of the facility area. The collection tank will be constructed to isolate runoff/washdown water from gray water production. The facilities will be designed to isolate domestic waste water from washdown/gray water. Domestic waste "black water" will pass to a holding tank and be transported on to approved treatment facility. The disturbed runoff and gray water will report to a 26,000 gallon tank which will be pumped to an abandoned area of the mine. A directional drill hole will be developed from the runoff collection tank through the Star Point Sandstone intercepting the abandoned workings of 2<sup>nd</sup> Right. From there, the water will flow down dip to the east to a series of abandoned longwall panels in the Hiawatha coal seam (refer to Volume 11 Appendix Volume - Hydrology: Appendix B Map 700-6). The runoff collection tank will be designed to effectively remove sediment. Pumping from the tank will be automatically controlled to maintain minimum level. In the event the area receives a storm that exceeds the capacity of the runoff collection tank and pump system, excess runoff water will report to the sediment pond. For runoff routing related to the surface facility, refer to Volume 11 Appendix Volume - Hydrology: Appendix B.*

*In addition, the design of the sediment pond includes a portable pump for decanting. If*

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*decanting of the pond is necessary, excess water will be pumped either back to the runoff collection system or disposed of at the Deer Creek Waste Rock Facility.*

*If the site receives a storm greater than the capacity of the protection systems (runoff collection tank and pumping system and decanting system of the sediment pond), discharge from the sediment pond will be routed through the designed principal and or emergency spillways (refer to Volume 11 Appendix Volume - Hydrology: Appendix B). Discharge from the sediment pond would constitute an emergency situation and comply with State of Utah Department of Environmental Quality Division of Water Quality storm water regulations.*

**R645-301-731.511**, The Permittee needs to specify how requirements R645-301-731.511.1 through 731.511.4 regarding discharges into an underground mine will be met. Volume 11, Section 513 states that when MSHA approval was obtained, documentation will be in Volume 11, Engineering Appendix B. Although only the final approval from MSHA is required to satisfy the R645 Coal Mining Rules, there is no indication of what the MSHA requirements are and how the proposed plan will meet them [JDS].

*MSHA was contacted regarding whether approval to discharge water to the abandon portion of the mine was necessary. According the William Knepp, "since it is not a degasification hole [75.371(dd)] and it is not being drilled in advance of mining [75.388], these regulations do not apply". Due to the elevation difference, water will not impound against the current seals.*

*R645-301-513 has been revised to include the following statement:*

*Since it is not a degasification hole [75.371(dd)] and it is not being drilled in advance of mining [75.388], these regulations do not apply. Upon completion of the drill hole, the ventilation and map will be revised.*

**R645-301-728**, According to the Permittee, Map HM-9 shows 3<sup>rd</sup> Right development workings of the Hiawatha Seam to be within approximately 215 feet of the coal seam outcrop (Volume 11, Section 728, Hydrologic Balance-Groundwater, F. RUNOFF AND GRAY WATER DISPOSAL - ABANDON MINE WORKINGS). This section also discusses water migrating down dip to the east and accumulating in the workings or infiltrating into the Star Point Sandstone. HM-9 shows projected workings (to within 50 feet of the coal seam outcrop in Mill Fork Canyon) and does not identify the workings where the water accumulates. The Permittee needs to refer to a map that shows the actual workings and provide an accurate description of the location of where the water accumulates [JDS].

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*R645-301-728 has been revised to include the following statement:*

*As stated previously, two separate drainage systems are provided at the Rilda Canyon portal facility site and are classified as "undisturbed" and "disturbed" collection systems. The "undisturbed" system collects overland runoff water above the portal site and from side slopes adjacent to the site and conveys it past the disturbed area into the natural channel of Rilda Canyon Creek. The "disturbed" collection system collects runoff from portal area, parking lots, storage areas and bathhouse area and conveys it to the runoff collection tank for discharge into the mine. The collection tank will be constructed to isolate runoff/washdown water from gray water production. The facilities will be designed to isolate domestic waste water from washdown/gray water. Domestic waste "black water" will pass through to a holding tank and be transported to an approved treatment facility. The disturbed runoff and gray water will report to a 26,000 gallon tank which then be pumped to an abandoned area of the mine (for additional detail related to the runoff collection tank refer to R645-301-530). A directional drill hole will be developed from the runoff collection tank through the Star Point Sandstone intercepting the abandoned workings of 2<sup>nd</sup> Right. From there, the water will flow down dip to the east to a series of abandoned longwall panels in the Hiawatha coal seam down gradient of the Rilda Canyon Springs (refer to Volume 11 Appendix Volume - Hydrology: Appendix B Map 700-6).*

**R645-301-728**, Under Sections B. INCREASED SEDIMENT PRODUCTION TO RILDA CREEK and E. INTERFERENCE TO RILDA SPRINGS (QUALITY) in the PHC are statements that grading and paving will be sloped to the north away from the receiving stream and drain to the sediment pond. The Permittee needs to clarify this, as only a small portion of surface drainage will report to the sedimentation pond: most surface drainage will be pumped underground into abandoned workings [JDS].

*R645-301-728 has been revised to include the following statement:*

*All grading and paving will be sloped to the north away from the receiving stream and drain to the runoff collection system sediment pond to minimize potential impacts. A small portion of the site below the runoff collection system will drain directly to the sediment pond (refer to R645-301-728 Hydrologic Balance - Groundwater: F - Runoff and Gray Water Disposal - Abandoned Mine Workings and Volume 11 Appendix Volume - Hydrology: Appendix B).*

**R645-301-728**, There is only a brief discussion of using salt on county road C#306 between Highway 31 and the portal facilities area, with no mention of impacts to Rilda Creek. Although Emery County is responsible to maintain this road, the Permittee has stated that, if necessary, they will use their own equipment to keep the road clear of ice and snow, including the use of a salt/sand mixture. The Permittee needs to determine the potential impacts and any Probable Hydrologic Consequences to Rilda Creek due to using salt on this road [USFS, JDS].

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*R645-301-728 has been revised to include the following statement:*

*During winter months snow removal will be required along the entire length of this road. As this is the responsibility of the Emery County Road Department, PacifiCorp may find the need to assist the road department by clearing snow from EC#306 with its own equipment. PacifiCorp will use a deicing product as specified by Emery County ~~50/50 mixture of salt and sand~~ on the county portion of the road to make the road safe for mine personnel and other local traffic ~~and to limit the amount of salinity in Rilda Creek~~. The ~~sand/salt mixture~~ deicing product will not be stored on-site but will be acquired at the Deer Creek portal facilities. No salt will be used within the disturbed areas of the Rilda Canyon Portal Facilities.*

**R645-301-820.113**, The Permittee must identify the permit and disturbed area boundaries on Map 500-4 and Map 500-5 [WHW].

*This deficiency has been addressed and incorporated on the map.*

**R645-301-830.140**, The Permittee must include all items listed on Map 500-3 and in section R645-301-521.180 of the application in the bond calculations, including disposal costs for asphalt, and include a narrative of what earthwork will be done at the site so that a third party could reconstruct the cost estimates [WHW].

*Until the facilities have been designed and approved by the Division, no bond will be calculated for the Rilda Canyon Portal Facilities. The information in the R645-301-800: Bonding have been replaced with the following statement:*

*When the application for the Rilda Canyon Portal Facilities is approved, the bond will be updated to reflect the added facilities.*

**R645-302-212.100**, The Permittee must:

Provide the December 2004 addendum to the Soil Survey Report for the 1.6 acres of undisturbed soils on the slopes within the experimental practice area;

*Volume 11 Appendix Volume - Soils Section: Appendix B has been amended to include topsoil and subsoil survey, Mt. Nebo December 2004.*

Provide photo No. 12 (logged by EIS in 2003/2004) of the disturbed soils in the experimental practice area as well as the analytical baseline information for site S8 of the EIS 2003/2004 survey or correlate photo No. 6 with the soil survey description of the site;

*Log sheet RS8 photo reference has been revised to Geotechnical/Soil Trench Photo No. 13 instead of Photo No. 12. Additional reference was added to RS8 for Photo No. 6. Analytical*

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*baseline data was not collected at RS8.*

Correctly label AMEC photos as Pits (except for trenches 1, 8, and 15) as described in the AMEC report [PWB].

*Geotechnical/Soil photos have been revised to indicated pits, except for trenches 1,8, and 15.*

**R645-302-212.200**, The Division recommends that the Permittee incorporate the following techniques to improve the experimental practice design:

- Apply a soil tackifier to the surface prior to rolling out the geotextile fabric;
- Cover the undisturbed slopes above the Rominger mine completely with geotextile fabric, rather than fabric strips;

*R645-302-212 has been revised to include the following statement:*

*After the removal of the topsoil, subsoil/construction fill will be excavated and hauled from the mine and sediment pond areas and segregated in separate area (Rominger Mine area) to develop the subsoil storage pile. Construction of the subsoil/construction storage site will begin by removing any large, existing vegetation and installing a culvert to channel natural undisturbed drainage away from the stockpile location. Installation of the bypass culvert will be accomplished by trackhoe(s), moving only the material necessary to install the culvert. Existing soil from the storage area will not be removed. A soil tackifier will be applied to the existing surface at a rate recommended by the supplier. Next, a colorful marker fabric ~~one foot in width~~ will be installed over the entire surface to ~~on ten foot centers~~ identify the predisturbed surface.*

- Dedicate the excess 5,900 yd<sup>3</sup> of soil for improved reclamation of the Rominger or LeRoy Mine sites. If used at the Rominger site, then do not apply fabric markers until 2.5 ft. of subsoil has been brought to the site, i.e. the additional 2.5 ft of cover will remain at reclamation. If used at the LeRoy site, apply to the Leroy site slopes during construction of the subsoil pile and sediment pond;

*Actually, the excess material was estimated at 6,010.19 cubic yards. This is an estimate made by calculating the amount of fill needed to complete the final reclamation topography. This result is then subtracted from the cut and fill estimates that were calculated for the construction of the facilities pad. Typically, a margin of error of 5% to 10% is allowed. The difference in this case is 5.13%.*

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*Since an exact amount of excess is unknown it was decided that plans to enhance the Leroy Mine should be struck from the permit application. Engineering and Soils sections have been revised to state: "Excess soil material will be used to create mounds, extrusions, etc. on the reclaimed surface.*

- Eliminate pocking on the steep undisturbed slopes, in favor of an anionic polyacrylamide (PAM) treatment of the soil surface to increase cohesion and infiltration of the water during revegetation without disrupting soil structure. PAM could be applied with seed, for more information, see the following web sites:

*R645-302-218 has been revised to include the following statement:*

*Steep Slopes (greater than 2H:1V): soil surface will be treated with an anionic polyacrylamide (PAM) to increase cohesion and infiltration of the water during revegetation. The PAM product will be applied contemporaneously with the seed mixture.*

*Moderate Slopes (2H:1V or less): The surface will be gouged with irregularly shaped depressions with the depth based upon available soil resource. This will also mix the hay and fertilizer into the upper portion of the soil surface.*

- Use bareroot or containerized plant stock (pre-treated with PAM) as enhancement plantings on the re-exposed, steep slopes. Suggested stock might include *Cercocarpus ledifolius*, *Amelanchier alnifolia*, *Juniperus osteosperma*, and *Pinus edulis* [PWB].

*R645-302-218 has been revised to include the following statement:*

*The appropriate seed mix (determined by pre-existing vegetation type) will be either broadcast or hydroseeded on the area at the rate specified in the Biology Section.*

**R645-302-212.310**, The Permittee must:

- Remove the limiting term "Excess" and replace with a definite commitment to replace boulders over the restored subsoil stockpile area, with a percentage boulder cover defined;

*R645-302-242 has been revised to include the following statement:*

*Excess Boulders will be randomly placed on the surface similar to pre-existing conditions, estimated at approximately five percent coverage.*

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- Explain the equipment to be used in Rominger Canyon during culvert installation and removal;

*R645-302-218 has been revised to include the following statement:*

*After the removal of the topsoil, subsoil/construction fill will be excavated and hauled from the mine and sediment pond areas and segregated in separate area (Rominger Mine area) to develop the subsoil storage pile. Construction of the subsoil/construction storage site will begin by removing any large, existing vegetation and installing a culvert to channel natural undisturbed drainage away from the stockpile location. Installation of the bypass culvert will be accomplished by trackhoe(s), moving only the material necessary to install the culvert.*

- Specify the seed mix to be used on the experimental practice area within the description of the experimental practice [PWB].

*R645-302-218 has been revised to include the following statement:*

*The appropriate seed mix (determined by pre-existing vegetation type) will be either broadcast or hydroseeded on the area at the rate specified in the Biology Section.*

**R645-302-212.410, -216**, The Permittee must further explain the statement that PacifiCorp has previously reclaimed buried soil horizons in place [PWB].

*R645-302-212 has been revised to include the following statement:*

*Example of Similar Practice:* *During the development of the Cottonwood Fan Portal (refer to Cottonwood Permit Volume 11), prior to the State Program, topsoil and subsoil excavated from the site were placed in storage piles on slopes 2H:1V or greater without removing the existing resources. PacifiCorp reclaimed this site in 1998. Soil resources were reclaimed from the storage sites back to approximate original contour. Vegetation has re-established successfully even with area receiving less than normal precipitation (personal communication with Patrick Collins, March 2005)*

**R645-302-214.200**, The Permittee must state the equipment to be used to install and remove the culvert and to construct and remove the subsoil pile [PWB].

*R645-302-218 has been revised to include the following statement:*

*After the removal of the topsoil, subsoil/construction fill will be excavated and hauled from the mine and sediment pond areas and segregated in separate area (Rominger*

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*area) to develop the subsoil storage pile. Construction of the subsoil/construction storage site will begin by removing any large, existing vegetation and installing a culvert to channel natural undisturbed drainage away from the stockpile location. Installation of the bypass culvert will be accomplished by trackhoe(s), moving only the material necessary to install the culvert.*

**R645-302-217**, The Division recommends that the Permittee consider adding the following techniques to improve the experimental practice monitoring information:

- Include baseline soil compaction information (lbs/sq ft) at foot intervals down to six feet or bedrock in the baseline monitoring of the undisturbed and disturbed soils in Rominger Canyon and indicate that comparison compaction information will be gathered after removal of the subsoil stockpile;
- Include investigation of the infiltration and erosion control of the PAM treated experimental practice area in the monitoring of the site, during years subsequent to reclamation;

*R645-301-242 has been revised to include the following statement:*

*The soil storage sites will be reclaimed by first removing the indicator fabric, then on slopes greater than 2H:1V, the entire surface will be treated with anionic polyacrylamide (PAM). On slopes less than 2H:1V, post pile bulk density data will be compared to baseline data, if the density values exceed the baseline by ten percent the entire surface will be ripped with a dozer to a depth of at least 1.0 foot or pocked with a backhoe.*

- Include regular checks of the culvert inlet and outlet in Rominger Canyon during operational monitoring of the experimental practice [PWB].

*R645-302-218 has been revised to include the following statement:*

*maintenance of the ditches, culverts and silt fences will comply to R645-301-742-300.*

**R645-302-322, -324**, Based on information provided in the application, the Division finds that there is an alluvial valley holding Rilda Creek in the bottomlands of Rilda Canyon. The extent of the alluvial valley floor is shown on Dwg. 200-1 as map unit A. These streamlaid deposits in the bottomlands have historically been the source of irrigation and culinary water in Emery County. The application must contain the following additional information:

- A summary list of the characteristics of the alluvium necessary to preserve the

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hydrologic functions;

- A quantitative description of the significance of the alluvium (spring collection system) to the community downstream;
- The likelihood of causing material damage to the quantity or quality of surface or ground waters supplying the alluvial valley floor and in particular the Emery County Water Users springs;
- A proposal for environmental monitoring during and after mining to ensure protection and preservation of the hydrologic functions of the alluvium [PWB, JDS].

*PacifiCorp in cooperation with NEWUSSD has conducted extensive investigations related to hydrologic characteristics of Rilda Canyon, including groundwater/alluvial resources. This information is detailed and referenced in Volumes 9 and 11. PacifiCorp recognizes the sensitivity of the groundwater resources and continues to cooperate with NEWUSSD in monitoring and investigative studies in and adjacent to Rilda Canyon. Volumes 9 and 11 documents the potential impacts due to coal mining operations and includes the completed mitigation in 1994 (water treatment plant construction). Volume 9, Appendix A includes commitments to monitor Rilda Springs for both quantity and quality.*

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*Attachments*

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### BUREAU OF LAND MANAGEMENT

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(UT-923)

**MAR 25 2005**

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), 1<sup>st</sup> 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 1<sup>st</sup> 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 "1<sup>st</sup> 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 1<sup>st</sup> 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

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from the rock slope drivages, the three (or more) entry access to coal remaining inby from the end of the 1<sup>st</sup> 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 "1<sup>st</sup> 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

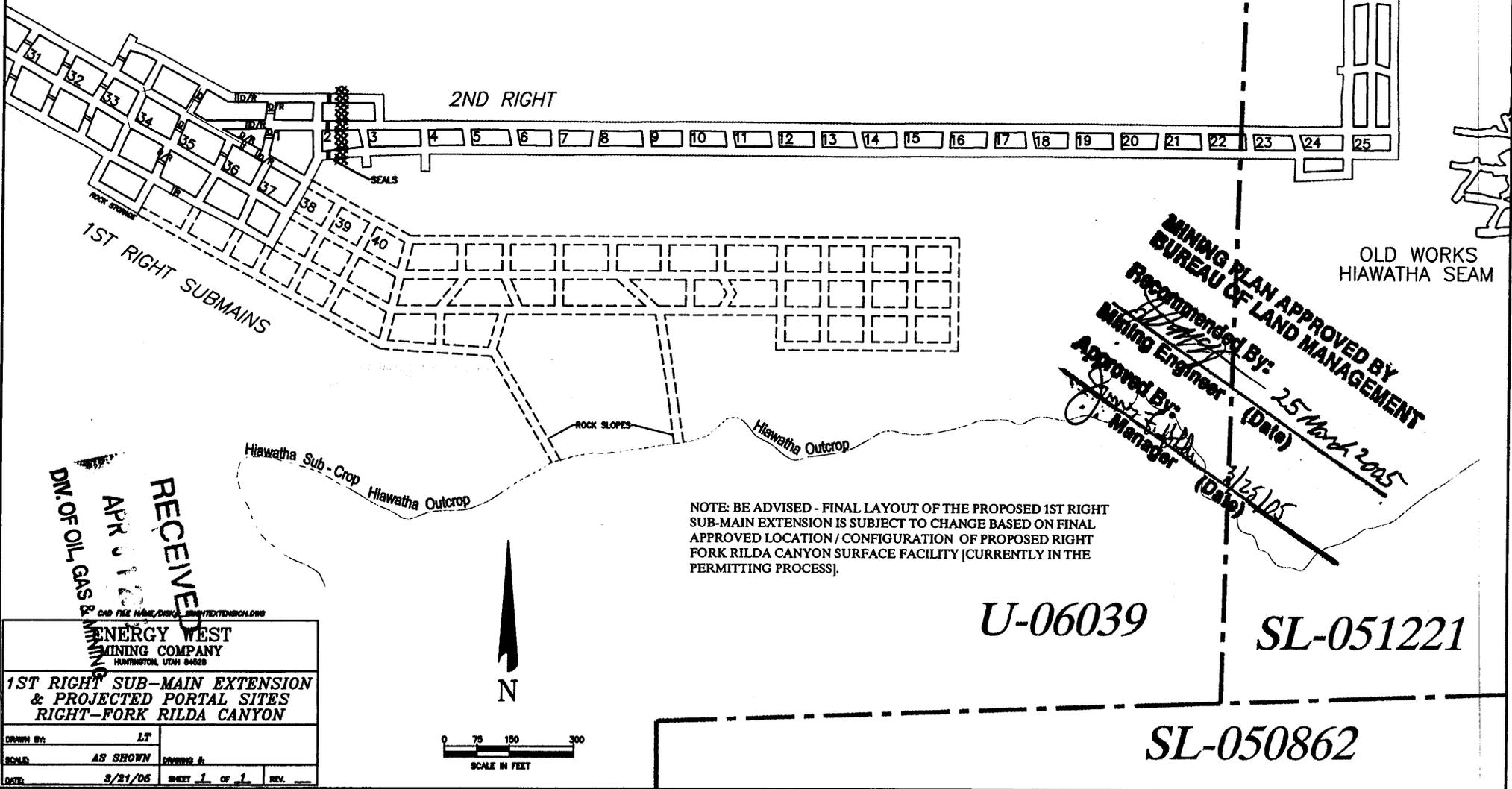
Enclosures:

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

cc: UT-070, Price, Utah (w/encl.)  
Utah Division of Oil Gas and Mining (w/encl.)  
1594 West North Temple, Suite 1210  
Salt Lake City, Utah 84114-5801  
Energy West Mining Company (w/encl.)  
P. O. Box 310  
Huntington, Utah 84528

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NOTE: BE ADVISED - PROPOSED DEVELOPMENT AND ROCK SLOPE LAYOUT IS SUBJECT TO CHANGE BASED ON ACTUAL FIELD LOCATION OF OUTCROP BURN. PROJECTED OUTCROP BURN LINE IS BASED ON SURFACE OUTCROP MAPPING AND UG EXPLORATION/DIRECTIONAL DRILLING.



NOTE: BE ADVISED - FINAL LAYOUT OF THE PROPOSED 1ST RIGHT SUB-MAIN EXTENSION IS SUBJECT TO CHANGE BASED ON FINAL APPROVED LOCATION / CONFIGURATION OF PROPOSED RIGHT FORK RILDA CANYON SURFACE FACILITY [CURRENTLY IN THE PERMITTING PROCESS].

MINING PLAN APPROVED BY  
 BUREAU OF LAND MANAGEMENT  
 Recommended By: *[Signature]* 25/Nov/2005 (Date)  
 Mining Engineer  
 Approved By: *[Signature]* 3/25/05 (Date)  
 Mining Manager

OLD WORKS  
 HIAWATHA SEAM

U-06039

SL-051221

SL-050862

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ENERGY WEST  
 MINING COMPANY  
 HUNTINGTON, UTAH 84303

1ST RIGHT SUB-MAIN EXTENSION  
 & PROJECTED PORTAL SITES  
 RIGHT-FORK RILDA CANYON

DRAWN BY:	LT
SCALE:	AS SHOWN
DATE:	3/21/05
SHEET:	1 OF 1
REV:	

