INTERWEST MINING COMPANY
A SUBSIDIARY OF PACIFICORP

Interwest Mining Company
Huntington Office
P. O. Box 310
15 North Main Street
Huntington, UT 84528

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

June 28, 2016

Subj: Amendment to Remove Containerized Plantings from the Deer Creek Rilda Left Fork Facility Reclamation Plan, PacifiCorp, Deer Creek Mine, C/015/0018, Emery County, Utah.

PacifiCorp, by and through its wholly-owned subsidiary, Interwest Mining Company, as mine manager, hereby submits an amendment to remove the containerized plantings from the revegetation plan for the Left Fork fan facility in Rilda Canyon.

The existing reclamation plan (refer to Volume 2, Part 4, Engineering R645-301-500, Appendix B) calls for approximately 3,000 containerized plants per acre. There are 2.33 acres of disturbance at the Left Fork facility which will require nearly 7,000 containerized plants to be planted. This is in addition to the native seed mix proposed for revegetation of the site.

It is PacifiCorp's experience that planting containerize planting does not provide satisfactory results to warrant undertaking this effort and expense. We have found from similar local reclamation projects that plant mortality far exceeds plant growth and succession when planting using live plants. Moreover, the planting of containerized plants does not significantly contribute to the goals of the success standards for the particular site. Therefore, PacifiCorp does not deem the use of containerized plants as a good use of its money or time and proposes removing the live plants from the revegetation list. A suitable native seed is proposed for replacement of the containerized plants.

Pages 1-6 have been revised to show the removal of the containerized plants and proposed additions to the seed mix to provide for woody shrubs and the woody density standard. There is also language referencing the Deer Creek Waste Rock Site throughout this reclamation plan. Since PacifiCorp deeded this property to Bowie Refined Coals LLC, those references require revision. C1/C2 form are include for your review.

Please feel free to call me at 435-687-4421 or Dennis Oakley at 435-687-4825 if you have any concerns or comments regarding this submittal.

Sincerely,

Kenneth S. Fleck

Kenneth F. Fleck
Geology and Environmental Affairs Manager

Enclosures

Cc file

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ☒ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☐ Transfer ☐

Permittee: PacifiCorp

Mine: Deer Creek Mine **Permit Number:** C/015/0018

Title: Amendment to Remove Containerized Plantings from the Deer Creek Rilda Left Fork Facility Reclamation Plan, PacifiCorp, Deer Creek Mine, C/015/0018, Emery County, Utah.

Description, Include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

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

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

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.

Kenneth Fleck (Print Name) Kenneth S. Fleck (Sign Name, Position, Date) Manager of Environmental Affairs JUNE 28, 2017

Subscribed and sworn to before me this 28 day of June, 2017

MacKenzi Young
Notary Public

My commission Expires: March 16, 2020

Attest: State of UTAH } ss:
County of EMERY }

NOTARY PUBLIC
MACKENZI YOUNG
Commission No. 686588
Commission Expires
MARCH 16, 2020
STATE OF UTAH

For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining

Form DOGM- C1 (Revised March 12, 2002)

APPLICATION FOR COAL PERMIT PROCESSING
Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: PacifiCorp
Mine: Deer Creek Mine **Permit Number:** C/019/0018
Title: Amendment to Remove Containerized Plantings from the Deer Creek Rilda Left Fork Facility Reclamation Plan, PacifiCorp, Deer Creek Mine, C/015/0018, Emery County, Utah.

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

Add	Replace	Remove	DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED
☐ Add	☒ Replace	☐ Remove	Volume 2, Part 4, R645-301-500: Engineering, Appendix B, Rilda Canyon Facilities, pages 1-6, replace all pages.
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	
☐ Add	☐ Replace	☐ Remove	

Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.	Received by Oil, Gas & Mining

RECLAMATION-RILDA CANYON SURFACE FACILITIES

Final Reclamation

Final reclamation of the Rilda Canyon Surface Facilities includes removal of the portal liners, portal sealing, removal of the facilities (fan, substation, pumphouse and water tank), removal of the pad and regrading of the pad area, removal of culverts, construction of reclaimed channels, regrading of the access road and reestablishing the Forest Development Trail, redistribution of topsoil and revegetation. Removal of the powerline will be accomplished through Utah Power personnel in accordance with USFS requirements.

Structure Removal

Upon completion of mining, the surface facilities structures will be dismantled and removed from the permit area and National Forest lands.

All structural steel, metal siding and other building materials associated with the fan installation, water tank and pumphouse, will be dismantled and salvaged or disposed of outside the permit area at an approved site. Concrete foundations and portal liners will be broken up and ~~removed from the permit area for disposal at the Deer Creek Waste Rock Site~~ backfilled in the portals, used as fill at the bottom of the fill slopes, or hauled off-site to an approved landfill.

Portal Sealing

The concrete portal liners associated with the two (2) portals will be demolished and ~~removed from the permit area for disposal at the Deer Creek Waste Rock Site in accordance with current regulations~~ backfilled in the portals, used as fill at the bottom of the fill slopes, or hauled off-site to an approved landfill. The portals will be sealed and backfilled as depicted in Figure 1, page 4 5-3. Backfill material will be obtained from the facility pad.

Substation and Powerline Removal

The substation will be dismantled and the structural steel and electrical components will be salvaged. The concrete foundation material will be broken up and ~~removed from the permit area for disposal at the Deer Creek Waste Rock Site in accordance with the current regulations~~ backfilled in the portals, used as fill at the bottom of the fill slopes, or hauled off-site to an approved landfill. The powerline will be salvaged and removed from the permit area by others in accordance with the USFS special use permit issued to Utah Power.

Pad and Access Road Removal

Approximately 11,280 cubic yards of pad material will be used for portal backfill and pad site and access road regrading. The remaining approximately 3,010 cubic yards of material will be hauled ~~off-site by the reclamation contractor and disposed of at the Deer Creek Waste Rock Site~~ 1st Right Portal Facility and used as backfill. All materials used for backfilling and grading will be non-toxic, non-acid forming.

The pad area and access road will be regraded as shown on Drawing CE-10853-EM, Packet 4-4A, Sheets 1 through 3. Following backfilling and grading, the surface of the backfilled material will be in an uncompacted, rough condition. If areas develop where the surface is not in such condition, the material will be ripped and roughened using track-hoes, dozers and/or had tools to eliminate slippage surfaces and promote root penetration. The areas will then be covered with a 12 inch layer of topsoil. Topsoil material will be redistributed on the regraded areas using backhoes, excavators and dozers. Following redistribution, the topsoil will be sampled and analyzed for fertility and other parameters listed within the Revegetation section of the MRP. Reclaimed areas within the Mountain brush/Salina wildrye community (access road area) will be seeded with the pinyon-juniper seed mixture listed on page 3-3, R645-301-300: Biology. Reclaimed areas within the Aspen/Fir/Dogwood and the Spruce/Fir coniferous forest communities (pad area) will be seeded with the following seed mixture:

~~RIPARIAN~~

Grasses		lbs/acre PLS
Streambank wheatgrass	Agropyron riparium var. Sodar	2
Indian ricegrass	Oryzopsis hymenoides var. Paloma	2
Needle and thread grass	Stipa comata	2
Slender wheatgrass	Agropyron trachycaulum	2
Western wheatgrass	Agropyron smithii	2
Kentucky bluegrass	Poa pratensis	1
Mountain Brome	Bromus carinatus	2
Blue wildrye	Elymus glaucus	1
Forbs		
Louisiana sage	Artemisia ludoviciana	2
Silky lupine	Lupinus sericeus	10
Northern sweetvetch	Hedysarum boreale	.5
Eaton penstemon	Penstemon eatonii	2
Blue aster	Aster glaucodes	.5
Shrubs		
Snowberry	Symphoricarpos oreophilus	1
Saskatoon Serviceberry	Amelanchier alnifolia	.5
Skunkbush Sumac	Rhus trilobata	.5
	Total	29

~~Shrubs, Container Stock~~		~~Plants/acre~~
~~Rocky Mtn. maple~~	~~Acer glabrum~~	~~400~~
~~Saskatoon serviceberry~~	~~*Amelanchier alnifolia*~~	~~400~~
~~Oregon grape~~	~~*Berberis repens*~~	~~400~~
~~Woods rose~~	~~*Rosa woodsii*~~	~~400~~
~~Booth willow~~	~~*Salix boothii*~~	~~400~~
~~Red osier dogwood~~	~~*Cornus stolonifera*~~	~~600~~

~~Trees, Container Stock~~		
~~White fir~~	~~*Abies concolor*~~	~~100~~
~~Narrowleaf cottonwood~~	~~*Populus angustifolia*~~	~~200~~
~~Douglas fir~~	~~*Psuedotsuga menziesii*~~	~~100~~
	~~Total~~	~~3,000~~

Woody plant density standards for success are 900 and 3,000 woody plants per acre for mountain brush/salina wildrye and aspen/fir/dogwood (including spruce/fir coniferous forest) communities respectively. ~~If monitoring, during the second year following reclamation, indicates the density standards are not being met, supplemental stocking of containerized plants will be initiated to achieve the required standards.~~ Final revegetation methods, maintenance, monitoring and sampling as discussed above apply to the Rilda Canyon Left Fork area.

Surface Drainage Control

Removal of the undisturbed bypass culverts will occur concurrently with pad and access road removal. The CMP culverts will be removed from the permit area and salvaged. The reclamation channels will be constructed as described in the Surface Runoff Control Plan found in Volume 3, Appendix VII. Silt fence with wire mesh backing will be installed for sediment control down-grade from the reclaimed areas at locations where natural concentration of flows occurs (see Plate 4-1A). Additionally, numerous depressions will be constructed with a track-hoe bucket to create a roughened, dimpled surface in the reclaimed areas. The silt fence will be maintained until vegetation is reestablished sufficient to control sediment.

Maintenance and Monitoring

Reclamation maintenance and monitoring will be conducted as outlined on page 3-7 in Section R645-301-300:Biology.

~~Riparian Enhancement, Restoration and Mitigation Measures~~

~~Riparian habitat mitigation measures will be implemented as part of the reclamation of the disturbed Aspen/Fir/Dogwood community. In cooperation with the USFS and UDWR, areas which may be benefited by shrub stocking will be identified in the vicinity of the reclaimed Rilda Canyon Facility site. Cuttings of the following woody species will be planted in the identified areas.~~

Woody plant	Cuttings/acre
Golden current	200
Squawbush	200
Choke cherry	200
Red osier dogwood	200
Woods rose	200
Willow	200
Total	1,200

Approximately 1.1 acres of Aspen/Fir/Dogwood community is affected by pad and road construction and reclamation. Therefore, 4.5 acres of adjacent riparian area will be enhanced through shrub stocking.

RILDA CANYON EARTHWORK
Mass Balance Quantities (cu. yds.)
Refer to Drawing CE-10891-EM, Sheets 1 through 3

	Stationing	Cut	Fill	Excess
Facility pad	2+30 to 2+80	698.4	0	698.4
Construction	2+80 to 5+30	0	8934.2	-8934.2
	3+50 to 5+30	3226.2	0	3226.2
Subtotal		3924.6	8934.2	-5009.6
Road	2+80 to 4+74	80.0	0	80.0
Construction	3+03 to 14+26	0	1613.2	-1613.2
	6+93 to 14+26	1262.6	0	1262.6
Subtotal		1342.6	1613.2	-270.6
Total		**5267.2**	**10547.4**	**-5280.2**

Approximately 10,547.4 cu. yds. of material are required for construction of the facility pad and road, Only 5,267.2 cu. yds. will be generated by excavation on-site, leaving a deficit of 5,280.2 cu. yds. However, approximately 3,742.9 cu. yds. of the excavated material is topsoil (see Drawing CE-10866-EM) which will not be used for pad or road construction. Therefore, a total deficit of 9,023.1 cu. yds. exists (5,280.2 + 3,742.9). This material will be purchased for pad and road construction.

	Stationing	Cut	Fill	Excess
Facility pad Reclamation	2+30 to 5+30	0	7037.2	
Road Reclamation	2+80 to 14+26	0	3946.0	
Portal Backfill	2 ea. (25'x8'x20')		296.3	
Total		**0**	**11279.5**	

Material available from pad and road fill	10547.4
Topsoil salvaged during construction	3742.9
Total material available for reclamation	14290.3
Material needed for final reclamation	11279.5
Excess fill to be hauled to ~~waste rock site~~	
1st Right Portal Facility	3010.8

RILDA CANYON RECLAMATION COST SUMMARY

Item	Description	Construction Days	Cost
17A	Binwall	1.1	$ 2,999.00
17B	Parallel Fans	6.8	$ 25,623.00
17C	Pumphouse/water Tank	5.1	$ 15,408.00
17D	Substation	1.1	$ 2,779.00
17E	Portals	3.0	$ 5,778.00
17F	Culverts and Riprap	3.0	$ 9,241.00
17G		3.7	$ 18,195.00
17H	Revegetation	9.0	$ 9,095.00
17I	Monitoring and Maintenance	12.0	$ 12,000.00
17J	Supplemental Stocking	2.0	$ 1,025.00
Total		**47.0**	**$ 103,943.00**

Item	Description	Construction Days	Costs
17A	Binwall	1.1	$ 2,999
17B	Pad and Road	6.8	$ 25,623
17C	Parallel Fans	5.1	$ 15,408
17D	Pumphouse/Water Tank	1.1	$ 2,779
17E	Substation	3.0	$ 7,578
17F	Portals	3.0	$ 9,241
17G	Culverts and Riprap	3.7	$ 18,195
17H	Revegetation	9.0	$ 9,095
17I	Monitoring and Maintenance	12.0	$ 12,000
17J	Supplemental ~~Stocking~~ Seeding	2.0	$ 1,025
	Total	47.0	$ 103,943

Labor rates and equipment costs were obtained from Means Heavy Construction Cost Data, 7th Annual Edition, 1993. Equipment specifications were obtained from Caterpillar Performance Handbook, 23rd Edition, October, 1992.