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INTERWEST MINING COMPANY
A SUBSIDIARY OF PACIFICORP

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April 7, 2017

Brian M. Pentecost
Forest Supervisor
Manti-La Sal National Forest
U.S. Forest Service

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DIV. OF OIL, GAS & MINING

Ahmed Mohsen
Price Field
Price Field Office
Bureau of Land Management
U.S. Department of Interior

Deer Creek Mine Closure Water Pipeline
UTU-91700
Proponent: PacifiCorp - Application for ROW

Gentlemen:

Attached to this letter are comments related to the recent issuance of a revised Environmental Assessment and unsigned Decision of No Significant Impact related to the proposal to install a buried water transfer pipeline from the Rilda Canyon portals of the Deer Creek Mine to the Huntington Power Plant in Emery County, Utah.

As you know, PacifiCorp submitted a SF-299 application to BLM (and to USFS) for a right-of-way for the construction of the pipeline to convey intercepted groundwater from the Deer Creek mine's Rilda Canyon Right Fork portal to the raw water pond at PacifiCorp' Huntington power plant. On September 27, 2016, the BLM and the Forest Service published their jointly developed Environmental Assessment. The Agencies subsequently conducted additional analysis, which was reflected in a revised EA jointly developed and issued by the agencies on March 7, 2017. The revised EA includes a Supplemental Hydrology Report, dated February 28, 2017, which is incorporated into the revised EA.

PacifiCorp submits the attached Comments on that revised EA and the associated unsigned FONSI. We believe these Comments will be helpful to BLM in considering future comments on the revised EA that may be submitted by other stakeholders, and in making your final determination. Incidentally, PacifiCorp has received approval dated April 7 from the Utah Division of Oil, Gas, and Mining to include the post mining discharge and water pipeline in the Deer Creek mine permit.

Sincerely,

Charles Semborski

Charles Semborski
Manager of Geology and Exploration
PacifiCorp Interwest Mining

cc: Ken Paur (U.S. Department of Interior)
Jeff Salow (USFS)
Steve Rigby (BLM)
Dana Dean (DOGM)
Matt Garn (DWQ)
Scott Child (Interwest)
Megan McKay (PacifiCorp)
Marty Banks (Stoel Rives)
Jenna Jorgenson (Jones & DeMille)

Comments of Proponent PacifiCorp re BLM's March 7, 2017 Revised Environmental Assessment for the Deer Creek Mine Closure Water Pipeline and associated Unsigned Finding of No Significant Impact (DOI-BLM-UT-G020-2016-0029-EA)

PacifiCorp has been working diligently since December 2014 to close the Deer Creek Mine in a compliant and environmentally sound manner. PacifiCorp's commitment to protecting the hydrologic regime during this mine closure is unprecedented in the coal mine industry. In order to meet applicable mine closure requirements, PacifiCorp must manage the groundwater that will naturally accumulate in the Deer Creek Mine during the closure process. PacifiCorp has determined that the most effective way to accomplish this task will be to take advantage of ongoing water needs at the nearby Huntington power plant. That mine water can be piped to and combined with other water sources (primarily Huntington Creek) in a lined reservoir at the plant. This combined water will be consumed almost entirely during normal plant operations. In fact, only about 3% of that combined water – including the mine water – will not be consumed and will be routed to a lined irrigation pond at the plant where it will be further diluted with other sources (natural runoff and plant operations) from the plant. The water in the irrigation reservoir is managed in accordance with the plant's groundwater permit requirements.

Routing that mine drain water to the power plant requires a pipeline across federal lands, including U.S. Forest Service lands. To initiate the approval of the proposed pipeline, PacifiCorp submitted a SF-299 application (BLM and USFS) for a right-of-way for the construction of the pipeline to convey intercepted groundwater from the Deer Creek Mine's Rilda Canyon Right Fork portal to the Raw Water Pond at PacifiCorp' Huntington Power Plant. On September 27, 2016, the BLM and the Forest Service (the "Agencies") published their jointly developed Environmental Assessment ("EA"). On November 21, 2016, the Sierra Club and HEAL Utah submitted to USFS various objections to the EA. On December 15, 2016, the Forest Service issued a letter indicating that "additional analysis is needed to adequately consider the direct, indirect, and cumulative effects of connected actions related to intercepted groundwater disposal as part of the Deer Creek Mine reclamation process… I have instructed the Forest to coordinate with both state and federal agencies to accomplish a hard look at the potential impacts of intercepted groundwater disposal prior to making a final decision on the Deer Creek Mine Closure Water Pipeline project." In response, additional analysis was undertaken to further consider the potential impacts of intercepted groundwater disposal. That additional analysis is reflected in a revised EA, which was jointly developed and issued by the Agencies on March 7, 2017 ("Revised EA"). The Revised EA includes a Supplemental Hydrology Report, dated February 28, 2017, which is incorporated into the Revised EA.

The following Comments provide additional relevant background and context that we believe will be helpful to BLM in considering future comments on the Revised EA that may be

submitted by other stakeholders, and in making your final determination.[1] For example, PacifiCorp's Comment #1 elaborates on the background provided in the Revised EA regarding the plant's lined Raw Water Pond; Comment #4 provides context to the explanation in the Revised EA that the intercepted groundwater is not "acid mine drainage"; Comments #2, #6, #8, #10, #12, #15 and #18 elaborate on the detail in the EA demonstrating that the eventual discharge of the intercepted groundwater into the plant's Raw Water Pond is for consumptive use and will not have an adverse impact on the water quality of Huntington Creek; etc.

We hope the Comments below will be helpful, and thank you for your consideration.

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1. **Comment #1 (the intercepted mine drain water will be sent to the lined Raw Water Pond; it will not be disposed of in unlined ponds or land application sites):**

- PacifiCorp proposes to divert mine water drainage from the Deer Creek Mine to the Huntington plant settling pond (also referred to as the Raw Water Pond). The settling pond, including its liner, was designed and engineered by Sterns Roger Corporation and approved for construction January 27, 1972.
    - Settling Pond Construction Details
        - Dead Storage Capacity 80.01 acre feet
        - Live Storage Capacity 256.43 acre feet
        - Pond liner
            - Thickness 3.0'
                - Compacted clay/silty soils compacted to 98% density (ASTM D1557-70)
- As indicated in the professional engineer certified construction drawing the settling pond includes a compacted clay liner three feet in thickness.
- The Huntington plant's 2016 Groundwater Permit renewal application states that the pond has a clay liner.
- Mine water drainage will be diverted from the mine directly to the Raw Water Pond for use in the power plant operations. No physical connection exists to allow the mine water to be diverted directly for use in land application practices

2. **Comment #2 (the fate of the mine drain water is fully addressed in the Revised EA, including in the Plan of Development and the Supplemental Hydrology Report):**

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[1] In the event BLM considers the objections to the original EA previously submitted by Sierra Club and Heal Utah to USFS on November 21, 2016, or future comments similar to those previous objections, these Comments below also address the issues raised in those objections.

The EA and corresponding references (Plan-of-Development – POD) outline the purpose and need of the mine water drain line. The POD expressly and clearly explains the final disposition of the mine drain water for use in power plant operations (POD page 6). As explained later in these Comments, 97 percent of the water from the Raw Water Pond will be consumed by plant operations. Because the Raw Water Pond contains other sources of water (storm water from the lands surrounding the pond and Huntington river diversion), mine water will make up only a small fraction of the remaining three percent of total water. See also attached Supplemental Hydrology Report.

3. **Comment #3 (the public comment and involvement requirements of NEPA and the CEQ regulations have been satisfied):**

BLM and USFS (the "Agencies") fully complied with the applicable laws, regulations and guidelines, including those pertaining to initial scoping and public notices, including NEPA and the associated the Council of Environmental Quality (CEQ) regulations. Federal law does not require the issuance of a "Draft EA" for public comment, or the opportunity for public comment on a final EA, NEPA and its implementing CEQ regulations provide in general terms that agencies "shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing" EAs. 40 C.F.R. § 1501.4(b); see Sierra Club v. Hodel, 848 F.2d 1068, 1094 (10th Cir. 1988) (summarizing CEQ requirements for public participation related to EAs and FONSIs).

When an agency prepares an EA instead of an EIS, however, it is NOT required to make a draft EA available to the public for comment before making a final decision. Greater Yellowstone Coal. v. Flowers, 359 F.3d 1257, 1279 (10th Cir. 2004) (stating that "NEPA's public involvement requirements are not as well defined when an agency prepares only an EA and not an EIS" and rejecting argument that agency acted arbitrarily by failing to make EA and other documents available to the public before issuing a final decision); see Fund for Animals, Inc. v. Rice, 85 F.3d 535, 549 (11th Cir. 1996) ("[T]here is no legal requirement that an Environmental Assessment be circulated publicly and, in fact, they rarely are." (emphasis in original)); Theodore Roosevelt Conservation P'ship v. Salazar, 616 F.3d 497, 518-20 (D.C. Cir. 2010) (finding no violation of § 1501.4(b) despite failure to solicit comments on draft EA); Bering Strait Citizens for Responsible Res. Dev. v. U.S. Army Corps of Eng'rs, 524 F.3d 938 (9th Cir. 2008) (rejecting argument that public circulation and comment on draft EA is required in every case under NEPA and noting that "conclusion is consistent with the views of other circuits, which uniformly have not insisted on the circulation of a draft EA."); Pogliani v. U.S. Army Corps of Eng'rs, 306 F.3d 1235, 1238-39 (2d Cir. 2002) (refusing to require agency to provide opportunity for public comment on draft EA and FONSI where such opportunity was not required by agencies' regulations implementing NEPA); Como-Falcon Cmty Coal., Inc. v. U.S. Dept. of Labor, 609 F.2d 342, 345 (8th Cir. 1979) (holding there is no statutory requirement for an agency to provide an opportunity for particular kind of method for public input and refusing to "by judicial decision legislate such a requirement into [NEPA]"); Alliance to Protect

Nantucket Sound, Inc. v. U.S. Dept. of Army, 398 F.3d 105, 115-16 (1st Cir. 2005) (holding that nothing in the CEQ regulations required circulation of a draft EA for public comment, except under certain "limited circumstances").[2]

As reflected above, and as summarized by one court, "the vast majority of circuits addressing this issue have found that the [CEQ] regulations do not require an agency to circulate an [EA] for public comment." Montrose Parkway Alts Coal. v. U.S. Army Corps of Eng'rs, 405 F.Supp. 2d 587, 596 (D. Md. Dec. 16, 2005), citing Alliance to Protect Nantucket Sound, Inc., 398 F.3d 105, 115 (1st Cir.); Greater Yellowstone Coal., 359 F.3d 1257, 1279 (10th Cir. 2004); Pogliani, 306 F.3d 1235, 1238-39 (2d Cir. 2002); Como--Falcon Cmty Coal., Inc., 609 F.2d 342 (8th Cir. 1979);[3] see also Nat. Res. Def. Council, Inc. v. U.S. Forest Service, 634 F. Supp. 2d 1045 (E.D. Cal. Sept. 5, 2007); Nat. Res. Def. Council v. Kempthorne, 525 F.Supp. 2d 115 (D.D.C. Nov. 30, 2007); City of Irvine v. Fed. Aviation Admin., 539 F.Supp. 17, 31-32 (N.D. Tex. Dec. 28, 1981) (excusing an agency's failure to provide any opportunity for public input into an EA and FONSI on the grounds that the agency was already "fully aware" of public objections to its proposed action). In short, nothing in NEPA, the CEQ implementing regulations, USFS's NEPA regulations, or USFS's guidance documents required USFS to prepare a draft EA or to provide an opportunity for public comment on the final EA and draft FONSI.

4. **Comment #4 (the EA and POD accurately confirm that the mine drain water is not acid mine drainage):**

As outlined in the Revised EA and the POD incorporated therein, mine drain water from Deer Creek is not "acid mine drainage." See Revised EA, at p. 16; POD, at p. 6. The term "acid mine drainage" refers to a unique issues that is an issue in other parts of the country. In fact, the excess alkalinity available from the dissolution of carbonate minerals of the strata of the Wasatch Plateau prevents acidity. Any branding of this water as "acid mine drainage" would be patently

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[2] The CEQ regulations do provide that, in "certain limited circumstances" which do not apply here, the agency "shall make the finding of no significant impact available for public review … for 30 days before the agency makes its final decision on whether to prepare an environmental impact statement and before the action may begin." 40 C.F.R. § 1501.4(e)(2). These include inapposite situations in which "[t]he proposed action is, or is closely similar to, one which normally requires the preparation of an environmental impact statement" or in which "[t]he nature of the proposed action is one without precedent." *Id.*; *see Theodore Roosevelt Conservation P'ship*, 616 F.3d 497 (finding no violation of § 1501.4(e)(s)). In any event, USFS has made the draft FONSI available for public review for 30 days before the agency makes its final decision.

[3] *See also Bering Strait Citizens for Responsible Resource Dev.*, 524 F.3d at 952 (9th Cir. 2008) ("we stress that the regulations governing public involvement in the preparation of EAs are general in approach, *see* 40 C.F.R. § 1506.6, requiring the circulation of a draft EA in every case would apply a level of particularity to the EA process that is foreign to the regulations. Also, requiring the circulation of a draft EA in every case could require the reversal of permitting decisions where a draft EA was not circulated even though the permitting agency actively sought and achieved public participating through other means. The regulations do not compel such formality.")

incorrect. PacifiCorp has retained Petersen Hydrologic, Inc. to prepare an independent professional analysis of this issue, showing that the mine discharge water is not "acid mine drainage." A copy of the Peterson Hydrologic report is attached to these Comments.

5. **Comment #5 (iron in the mine drain water does not need to be treated because the drain water will be transported via the pipeline to the Raw Water Pond for consumption, not for discharging into a receiving drainage; all new point source discharges, treated or otherwise, are prohibited within National Forest boundaries):**

PacifiCorp is proposing to transport the groundwater via a pipeline to the Raw Water Pond for consumption, not for discharging to a receiving drainage. PacifiCorp has documented the hydrogeologic characteristics and outlined the scientific reasons for the elevated total iron in the groundwater. Monitoring of the intercepted groundwater has shown that the elevated total iron is related to the presence of a pyritic split in the coal seam. That contribution of iron is finite and the level of total iron will reduce to background levels in about four to five years. It is not the iron in the mine drain water that is preventing PacifiCorp from obtaining a discharge permit within National Forest boundaries; rather, all new point source discharges of water, treated or otherwise, are prohibited within the National Forest boundaries after the effective date of designation (R317-2-3). This justification for the pipeline to route the intercepted groundwater from the Deer Creek Mine through a pipeline to a point outside the Forest Boundary is documented in the Revised EA. Revised EA, p. 1.

6. **Comment #6 (the Revised EA and Supplemental Hydrology Report adequately addresses the fate of the mine drain water, and analyses of the current baseline conditions and of the potential impacts of the use of the mine drain water):**

- The Revised EA and POD outline the construction details of the pipeline terminating at the power Raw Water pond. As stated earlier, the Raw Water Pond at the Huntington plant includes a clay liner. Neither the Revised EA, the POD nor the application documents state that the water will be stored in an unlined reservoir. The Huntington plant's 2016 Groundwater Permit renewal application submitted to the Utah Department of Environmental Quality states the pond has a clay liner.
- The POD states that the mine water along with water diverted from Huntington Creek will be stored in the Raw Water Pond for plant operations. Water from the Raw Water Pond is used for various plant operations. After usage in the plant, a small fraction (~3%) of the total combined water sources (including mine water) used at the plant will be routed to the irrigation reservoir.
- The Revised EA and Supplemental Hydrology Report contain an adequate analysis of current baseline water quality conditions. PacifiCorp has a comprehensive hydrologic monitoring program for the Deer Creek Mine including; intercepted groundwater,

groundwater springs and surface drainage systems for the East Mountain property. These data establish a solid baseline and support PacifiCorp's conclusions related to the hydrology of the intercepted groundwater in the Deer Creek Mine and ultimate use as a source of water for the power plant. PacifiCorp provided these water quality analyses to the governmental agencies to assist their review.

7. **Comment #7 (the Pond does not and will not contain any process water, but only mine drain water, water from Huntington Creek, and storm water runoff):**

As addressed in Comment #1 above, the Raw Water Pond is lined. As documented in the Huntington Power Plant Storm Water Pollution Prevention Plan (amended June 2016), the Raw Water Ponds' only source of water is from the Huntington Creek and storm water runoff– no co-mingling occurs within the Raw Water Pond.

8. **Comment #8 (the Revised EA and Supplemental Hydrology Report satisfy the scientific requirements of NEPA, and confirm that the blending of the Huntington Creek water with the mine drain water will not cause any significant changes to the water in the Raw Water Pond):**

PacifiCorp has previously acknowledged that the Raw Water Pond has had identifiable leaks of the liner system. When such leaks are identified, PacifiCorp has made immediate repairs to the liner system. PacifiCorp conducts routine inspections of the Pond, including of the dam and embankment structures to verify integrity. As part of the EA process, PacifiCorp provided a hydrologic analysis to the governmental agencies comparing the diverted water from Huntington Creek to the projected blended ratio including the intercepted groundwater from the Deer Creek Mine. That analysis concluded that blending the Huntington Creek water with the intercepted groundwater from Deer Creek will not cause any significant geochemical change to the water stored in the Raw Water Pond. In the event of a future leak in the Raw Water pond liner, the relatively small amount of mine water in the Raw Water pond will cause no environmental harm to the hydrologic balance. (Refer to PacifiCorp's Comment #9 for a discussion of mine water compliance to the Numeric Criteria for Aquatic Wildlife – 3C). As part of the Revised EA process, Pacific provided a supplemental hydrologic analysis, further confirming that blending the Huntington Creek water with the mine drain water will not cause any significant changes to the water in the Raw Water Pond.

9. **Comment #9 (PacifiCorp conducted its sampling and analysis of the mine drain water based on EPA's instructions):**

PacifiCorp has collected hundreds of samples documenting the quality of the intercepted groundwater at the Deer Creek Mine. The analysis includes not only solute constituents

documenting the geochemical nature of the groundwater, but also whole effluent testing that has verified the groundwater discharge is not detrimental to aquatic life. All water, whether surface or groundwater will include minor amounts of inorganic compounds, such as salts and metals. Levels of the constituents depends upon the hydrogeologic setting and interaction of the groundwater and the geologic formations from which it derives. DWQ requested that PacifiCorp sample the intercepted groundwater for the pollutant parameters on EPA's Priority Pollutant List, and analyze to comply with the EPA Form 2C requirements. PacifiCorp continues to sample and analyze the intercepted groundwater at Deer Creek, and to provide the detailed results to multiple governmental agencies.

The following table updated through March, 2017) compares the numeric standards established by the State of Utah (Table 2.14.2 – Numeric Criteria for Aquatic Wildlife 3C – Huntington Creek) and groundwater intercepted in the Deer Creek Mine projected to be discharged at Rilda Canyon Portals.

Parameter	**State of Utah Utah Administrative Code Standards of Quality for Waters of the State Rule R317.2 Table 2.14.2 *Numeric Criteria for Aquatic Wildlife 3C – Huntington Creek***	**Deer Creek Mine Intercepted Groundwater Projected Discharge at Rilda Canyon Portals** [Note 1]
pH (units)	6.5 – 9.0	7.52, ten samples
Aluminum, ug/L (dissolved) (1 hour average)	750	60 Detected in three out of the ten samples
Arsenic, ug/L (total) (1 hour average)	340	ND, ten samples Lab reporting limit 10
Cadmium, ug/L (total and dissolved) (1 hour average)	2.0	ND, ten samples Lab reporting limit 1
Chromium, ug/L (total) (1 hour average)	16	5.0, nine samples Detected in seven of the nine samples
Copper, ug/L (total and dissolved) (1 hour average)	13	ND, ten samples Lab reporting limit 10
Lead, ug/L (total and dissolved) (1 hour average)	65	ND, ten samples Lab reporting limit 10
Mercury, ug/L (total) (4 day average)	0.012	ND, nine samples Lab reporting limit <0.2, eight samples Lab reporting limit <0.1, one sample

Nickel, ug/L (total) (1 hour average)	468	37.0, nine samples
Selenium, ug/L (total) (1 hour average)	18.4	ND, nine samples Lab reporting limit <2
Silver, ug/L (total) (1 hour average)	1.6	ND, nine samples Lab reporting limit <2
Zinc, ug/L (total and dissolved) (1 hour average)	120	49.0 Detected in two out of the nine samples
Sample period represents monthly samples from June 2016 - March 2017 of intercepted groundwater discharging from 11th – 17th West sealed area Note 1: Samples collected from 11th – 17th West discharge ND: Not Detected		

All of the water quality constituents analyzed in the Deer Creek Mine intercepted groundwater projected to discharge at Rilda Canyon Portals comply with the State of Utah (Table 2.14.2 – Numeric Criteria for Aquatic Wildlife 3C – Huntington Creek) numeric criteria for aquatic wildlife for the receiving waters of Huntington Canyon.

10. **Comment #10 (the Revised EA and associated hydrology analyses carefully considered and concluded that the blending of the Huntington Creek water with the mine drain water will not cause a significant geochemical change to the water stored in the Raw Water Pond (including the TDS concentrations)):**

As noted previously, the POD (included as part of the Revised EA) provides that the mine water along with water diverted from Huntington Creek will be stored in the Raw Water Pond for plant operations. Of that water in the Raw Water Pond, approximately 97% of it will be from the Huntington Creek, and only approximately 3% of it will be mine drain water from the pipeline. That blended water from the Raw Water Pond will be used for various plant operations (primarily evaporation), and ultimately, after usage in the plant, a small fraction (~3%) of the blended water will not be consumed and will be routed to the irrigation reservoir. That 3% will be further diluted in the irrigation reservoir by other source waters (natural runoff and plan operations) from the plant.

The groundwater from the mine will not have a direct impact to Huntington Creek. As part of the EA process, PacifiCorp provided a hydrologic analysis to the governmental agencies comparing the diverted water from Huntington Creek to the projected blended ratio including the intercepted groundwater from the Deer Creek Mine. The resulting Hydrology Report concluded that blending the Huntington Creek water with the intercepted groundwater from Deer Creek will not cause a significant geochemical change to the water stored in the Raw Water Pond. As part of the Revised EA process, additional hydrological analyses were conducted. The resulting Supplemental Hydrology Report further confirmed that the blending will not cause a significant geochemical change. Even so, PacifiCorp conducts routine inspections of the Pond, including of

the dam and embankment structures to verify integrity. If a leak is identified, PacifiCorp makes an immediate repair to the liner system.

The Supplemental Hydrology Report also confirmed that, based on the information and analysis, "there should be no measurable cumulative effects to the water quality of the irrigation pond or subsequent irrigation practices." Supplemental Hydrology Report, p.7.

11. **Comment #11 (PacifiCorp does not discharge into Huntington Creek and therefore does not need a UPDES permit, but it may apply for one if at some future date it desires to discharge into Huntington Creek):**

Because PacifiCorp does not currently discharge from the Huntington plant, it does not have and is not required to have a UPDES permit to discharge from the Huntington plant.

PacifiCorp is not proposing to discharge the mine drainage to a receiving drainage of Huntington Canyon, but instead to consume the intercepted water in the power plant operations. If in the event PacifiCorp alters the plan and discharges the water to the receiving drainage of Huntington Canyon the following steps are required by state and federal regulations:

- Meeting with DWQ staff and management:
    - Discussion of optional point source discharge options
    - Water quality criteria sampling for application submittal
- Sample intercepted mine groundwater according to the specifications outlined by DWQ
- Apply for a point source discharge permit (important to note that in any event, PacifiCorp would not be allowed to establish a new point source discharge within the Forest Boundary, meaning that a pipeline would be required to be built at least to the Forest boundary). PacifiCorp officially submitted an application to UDEQ on September 15, 2016 to revise the current Deer Creek UPDES permit to allow for a permanent discharge point to Huntington Creek outside the Forest boundary.
    - Provide the necessary hydrologic background data to DWQ including the anti-degradation analysis
- DWQ accepted PacifiCorp's application as complete on October 5, 2016

12. **Comment #12 (water in the Raw Water Pond that remains after passing through the plant operations (approx. 3%) is used to irrigate the research farm, which has a field drain collection system to eliminate any potential diversion to Huntington Creek):**

Water from the Raw Water pond is not physically connected to the irrigation reservoir. Water diverted from Huntington Creek to the Raw Water pond is used in various functions within the plant operations, mainly in the cooling towers and boiler vents. All but approximately 3% of that water from the Raw Water Pond is evaporated; the remaining unconsumed 3% is transferred to the irrigation reservoir, where it can be further diluted by other sources of water (surface runoff)

from the plant. Some of that diluted 3% is used to irrigate research farms. PacifiCorp has a field drain collection system, which was amended back in late 2008 and early 2009 eliminating any potential diversion to Huntington Creek. Water from the field drains is diverted back to the plant with a lift station pump or diversion ditches for use in the plant scrubber operations or transferred to the irrigation reservoir.

13. **Comment #13 (Huntington Creek is "impaired" for TDS, pH, dissolved oxygen and temperature; the blending of the mine drain water in place of a portion of the water from Huntington Creek will mitigate that impairment):**

More water will be left in Huntington Creek – thereby improving water quality – as a result of the pipeline supplying additional water to the Raw Water Pond from the Deer Creek Mine. As explained above, the water from the mine will not impair Huntington Creek because it will not be discharged, but consumptively used at the plant. In any event, the following addresses the reasons for Huntington Creek being listed as impaired.

Levels of TDS, pH, dissolved oxygen, and temperature outside the range of the numeric criteria set by EPA and UDEQ do indeed impact the beneficial uses of the Huntington Creek. However, Huntington Creek has not always been listed as impaired. Prior to the current Integrated Report ("IR"), 6 year period of record from October 1, 2008 through September 30, 2014, data utilized by DEQ was collected by UDEQ, USFS, BLM and a variety of other state and local agencies that strictly followed a QA/QC program where State of Utah certified analyzing equipment was calibrated and used by qualified and experienced individuals. During this current IR assessment period, EPA required UDEQ to include data collected in rivers and streams as part of the compliance monitoring for the Division of Oil, Gas, and Mining (DOGM) as well as data collected by citizen groups. (2016 IR ver. 2.0, Introduction, page 16). The DOGM database in particular included field monitoring results which by their nature include results from instrumentation not as accurate as lab based instrumentation. Without the inclusion of this new data set, excluding TDS (see separate discussion concerning TDS below) for Assessment Units ("AU") Huntington Creek 2 ("HC2") and Huntington Creek 3 ("HC3"), would not have been designated as impaired.

The additional data set collected for these AUs came from the DOGM hydrology database. DOGM requires (R645-301-723) water samples to be collected and analyzed according to the methodology in the current edition of Standard Methods for Examination of Water and Wastewater" or the methodology in 40 CFR Parts 136 and 434. Field analytical results can vary from laboratory analytical results due to the type of instrumentation used (portable meters and probes). For instance, the table below shows all samples collected within the period of record that fell out of the range of the numeric standard criteria for TDS (1200 mg/L), pH (6.5 – 9), Dissolved Oxygen (DO) (minimum 6.5 mg/L), and Temperature (20° C). Notably, pH units for the Deer Creek Mine Rilda Canyon impair the beneficial uses of Huntington Creek. All

values excluding TDS showing impairment were field results. Lab results, excluding TDS, did not result in any impairment designations.

The following table identifies all sample sites that resulted in exceedances of the water quality numeric criteria used for UDEQ's decision for determining whether Assessment Units HC2 and HC3 support their designated uses or not. Flow has been added to the table to show the contribution to Huntington Creek. (Data retrieved from the Excel file downloaded at www.deq.utah.gov, 2016 Integrated Report, Chapter 3, River and Stream Assessment. Select the link All Rivers and Stream Assessments)

Mine	Site	Date	TDS (mg/L)	pH (field)	pH (lab)	DO (mg/L)	Temp C°	Flow (gpm)
Bear Canyon	CK-2	6/10/16					23.7	140
Bear Canyon	CK-2	6/8/15					22.1	150
Bear Canyon	CK-2	10/22/14					23.3	100
Bear Canyon	CK-2	6/10/14					22.3	140
Bear Canyon	CK-2	6/27/13					23.5	120
Bear Canyon	CK-2	6/25/12					20.5	160
Bear Canyon	SBC-17	6/9/16					21.8	4
Bear Canyon	SBC-17	6/8/15					22.1	20
Bear Canyon	SBC-17	10/22/14					21.5	10
Bear Canyon	SBC-17	6/10/14					20.2	10
Bear Canyon	SBC-17	6/27/13					21.4	5
Bear Canyon	SBC-17	6/25/12					20.1	7
Bear Canyon	SBC-17	8/4/09					22.5	1
Bear Canyon	SBC-17	2/22/06 See Note 1					50.8	
Bear Canyon	FC-2	10/27/15				6.1		10
Bear Canyon	FC-2	8/12/15				3.6		10
Bear Canyon	FC-2	10/23/14				6.1		5
Bear Canyon	FC-2	8/13/14				6.3		5
Bear Canyon	FC-2	10/24/13				6.0		5
Bear Canyon	FC-2	8/14/13				6.1		5
Bear Canyon	FC-2	8/24/12				6.03		5
Bear Canyon	BC-2	6/9/16	1290					40
Bear Canyon	BC-2	8/10/15	1269					40
Bear Canyon	BC-2	2/14/14	1244					50
Bear Canyon	BC-2	9/27/11	1305					20
Bear Canyon	BC-2	2/25/10	1238					1.5
Crandall Canyon	UPF-1	6/27/14	1781					1540
Deer Creek	HCC01	6/6/13				4.6		43,668.24
Deer Creek	HCC01	3/12/13				6.33		3051.84
Deer Creek	HCC01	6/9/10				5.28		102,102.00
Deer Creek	HCC02	6/3/15				6.25		67,903.44

Deer Creek	*HCC02*	*9/3/14*				*5.02*		*18,535.44*
Deer Creek	*RFC-1*	*6/4/14*		*9.03*	*8.67*			*2894*
Deer Creek	*RFC-1*	*9/5/13*		*9.17*	*8.49*			*368*
Deer Creek	*RFC-1*	*6/3/13*		*9.08*	*8.55*			*1151*
Deer Creek	*RFC-1*	*9/6/11*		*9.05*	*8.55*			*190*
Deer Creek	*RCF3*	*9/14/15*				*5.59*		*20*
Deer Creek	*RCF3*	*6/2/15*				*5.0*		*2693*
Deer Creek	*RCF3*	*6/4/14*				*6.0*		
Deer Creek	*RCF3*	*3/12/13*				*5.75*		*50*
Deer Creek	*RCF3*	*6/15/11*				*5.5*		*26076*
Deer Creek	*RCF3*	*6/8/10*				*5.74*		*2903*
Deer Creek	*RCW4*	*3/24/09*	*1393*					*148.6*

Note 1: Although outside the period of record for the current IR, this data point shows a water temperature of 123.44° F. Obviously this data is an outlier and should have been omitted during review of the data.

The analytical results for DO are also misleading. Both Bear Canyon and Deer Creek reported DO below the limit of the numeric criteria. However, when comparing the analysis results for DO to flow for the Deer Creek sites and Huntington Creek, a reviewer must conclude that there was a potential problem with instrumentation, or the selection of the stream segment. This provides insight on the potential problems of simply including additional hydrologic data without evaluating the merit of data. At the time the sample was collected, flow in Huntington Creek was well above average flow rates and it would not have been likely to produce low DO results as shown for the sites. The numeric results for DO for Bear Canyon and Deer Creek Canyon have an insignificant impact to the Huntington Canyon drainage as shown by the negligible flows reported in comparison to the total flow rate of Huntington Creek. Proportional flow rates from the contributing sub-drainages should have been evaluated in quantifying the relationship to the impairment of Huntington Creek.

TDS is also found in three monitoring locations to be outside the numeric criteria used for the AU. Bear Canyon exceeded the numeric criteria in one sample per year in very low flow conditions. Crandall Canyon and Deer Creek both exceeded one sample during the 6 year assessment period of the IR. Huntington Creek samples (sampling locations of Huntington Creek HCC01 and HCC02) did not exceed the numeric criteria during the 6 year assessment period of the IR. The exceedances reported have negligible impacts to the water quality of the entire Huntington Canyon drainage system.

Any attempt to relate the impairment status of HC2 and HC3 with the irrigation practices of the Huntington plant would be very misleading and would show a complete misunderstanding of the assessment methods used to determine whether the designated uses are supported or not.

14. **Comment #14 (the blending of the mine drain water will not alter the concentrations of TDS in the water going to the irrigated research farm):**

Diverting mine water to the raw water pond that will be approximately 3% of the total diverted water to the pond, will not alter the operation of the plant. This means that the combined water in the Raw Water pond will continue to be used in plant operations using existing operational constraints just as it was used before the mine water was introduced. For example, if the mine drainage water flow rate diverted to the plant is 500 gpm and the average diversion of Huntington Creek is 8,500 gpm, and knowing that approximately 97% of the diverted water is evaporated, mainly by the cooling towers and boiler vents, approximately 15 gpm of the mine water diversion will be routed to the irrigation reservoir as a portion of the combined water. However, regardless of whether the water supply to the Raw Water pond is strictly from the Huntington Creek or includes the proposed mine water, total diversion from the plant operations to the irrigation pond will remain constant. The Deer Creek Mine water supply has an increased TDS concentration as compared to the Huntington Creek supply; however, the Huntington plant cooling tower circulating water quality is controlled through a water treatment process such that the TDS concentration of the circulating water will not be affected by the use of the supplemental Deer Creek Mine supply. In essence, although the fraction of the make-up water supply to the Huntington cooling tower circulating water system from the Deer Creek Mine will have an increased TDS concentration as compared to the Huntington Creek water supply, the cooling tower circulating water system will be controlled to maintain the current TDS concentration.

15. **Comment #15 (the Revised EA and Supplemental Hydrology Report addressed the fate of the mine drain water):**

The NEPA analysis was done primarily for the construction of the pipeline, rather than the impacts of the water discharge. This NEPA action rightly focuses primarily on the pipeline construction impacts, whereas the water quality issues are appropriately addressed primarily in other forums such as UDEQ and UDOGM. Nevertheless, the NEPA analysis for the pipeline project also rightly evaluates the fate of the mine drain water and potential impacts to water resources under the cumulative impacts sections. EA, p. 24; Supplemental Hydrology Report, pp. 7-10.

16. **Comment #16 (the "purpose and need" statement and the scope of the NEPA analysis are appropriately tailored to address the reasonably foreseeable impacts):**

The Agencies accurately disclosed the potential environmental impacts associated with the installation of the mine drain water pipeline and the usage at the power plant. Use of the mine water will not alter the plant operations, and diversions by the plant are not directly linked to the irrigation reservoir. The Supplemental Hydrology Report concluded that mine drain water "meets EPA primary drinking water standards (Appendix II). Once groundwater is diluted with Huntington Creek Water in the raw water pond, the water in the raw water pond would meet the

Utah Numeric Criteria for Aquatic Wildlife (Huntington Creek 3C)." Supplemental Hydrology Report, p. 9. In fact, as outlined previously, sampling of the mine water has confirmed that the projected mine drainage meets the Utah Numeric Criteria for Aquatic Wildlife (Huntington Creek 3C) without blending. Although the irrigation systems and ground and surface water are regulated by the State of Utah Division of Water Quality, BLM and USFS nevertheless evaluated the impacts of the mine drain water on the groundwater and surface water in the Huntington plant vicinity.

17. **Comment #17 (the Agencies considered a reasonable range of alternatives):**

The EA, which includes the POD documents, discloses PacifiCorp's attempts to close the mine and redirect the water from the northwest portion of the mine to the Deer Creek portals. The Agencies considered alternatives to installing the pipeline, such as installing a hydrologic bulkhead in the Deer Creek Mine. Mine Safety and Health Administration (MSHA) denied PacifiCorp's request to install hydrologic bulkheads in the Deer Creek Mine in April 2016. That action will cause water intercepted in the mine to gravity flow to the Rilda Canyon portals and if discharged, will result in non-approved point source discharges. Location of the Rilda Canyon portals within the Forest boundary presents another difficultly. Anti-degradation regulations prohibit any new point source discharges within the Forest boundary. Given these circumstances, options to drain the intercepted groundwater from the mine become are problematic. PacifiCorp, after discussions with parties of interest, including local, state and federal agencies, proposed the pipeline alternative to drain the mine minimizing the impacts to the environment.

18. **Comment #18 (the Agencies adequately considered the baseline water conditions at all relevant locations, including downstream of the Raw Water Pond):**

PacifiCorp has conducted extensive hydrologic monitoring for several decades related to the Deer Creek Mine and power plant including; groundwater studies (seeps and springs), intercepted groundwater in the mine and surface drainage systems. Routine hydrologic data collected by PacifiCorp is uploaded to the DOGM database, and made available to the Agencies. In addition to the hydrologic monitoring, PacifiCorp has conducted numerous studies to determine the hydrologic regime and potential hydrologic consequences of conducting underground coal mining. Applicable data related to the proposed mine drain pipeline has been transmitted to Agencies to evaluate the hydrologic conclusions. The Supplemental Hydrology Report contains additional baseline water quality data.

19. **Comment #19 (the Agencies considered but did not defer to the permitting processes of the Utah Division of Water Rights and Utah Division of Water Quality):**

PacifiCorp applied and received approval from Division of Water Rights to include the mine portals of the Deer Creek Mine (Deer Creek Canyon and Rilda Canyon) as permanent points of division for use in the power plant (approved November 2016). PacifiCorp has applied for an additional UPDES outfall for the Deer Creek Mine (Outfall 003) to potentially discharge intercepted groundwater directly to Huntington Creek at some future date if necessary. The UPDES permitting process will ensure that any potential impacts to the receiving stream are properly regulated. The Agencies are not deferring to these permitting processes in lieu of a NEPA analysis, rather in analyzing the potential impact of the proposed action on water quality, they are taking into consideration that any such future discharges will be subjected to a rigorous regulatory permitting process.

20. **Comment #20 (although neither a stream alteration nor a 404 permit is required, it is the proponents,' not the Agencies,' responsibility to ensure that any needed permits are obtained):**

As stated in the Revised EA and POD documents, PacifiCorp proposes to construct/bury a HDPE pipeline within the existing rights-of-way in Rilda Canyon along Emery County Road #306 and Huntington Canyon State Highway 31. Construction layout and installation techniques employed avoids impacts to the streams in Rilda and Huntington canyons. PacifiCorp coordinated these pipeline construction efforts with State of Utah Water Rights and the United States Army Corps of Engineers. Both agencies verified that neither a State of Utah (Stream Alternation permit) nor a US Army Corps of Engineers (Federal Clean Water Act Section 404) permit is required for the proposed Deer Creek Mine water relief pipeline project. Even if such permits were required, it is not the Agencies' responsibility under NEPA to ensure that a proponent obtains the needed permits; rather, the Agencies' responsibility is simply to take a hard look at the reasonably foreseeable environmental impacts. It is the proponent's responsibility to obtain the needed permits.

21. **Comment #21 (the Agencies considered and addressed in the Revised EA appropriate mitigation measures):**

PacifiCorp has complied with all rules and statutes that deal with protective measures to prevent leakage / contamination of existing water resources while the pipeline is transporting water. PacifiCorp has committed to monthly monitoring of water quantity and quality at the upstream and downstream ends of the pipeline, when transporting water, to ensure that there are no leaks or water quality excursions until the water quality has reached compliance levels. In any event, it is not the role of NEPA or the DN/FONSI to require mitigation or monitoring; rather, NEPA's role is to require the Agencies to take a hard look at the reasonably foreseeable environmental impacts.

22. **Comment #22 (the Agencies evaluated the reasonable foreseeable impacts of the proposed action, including any reasonable foreseeable impact to any sensitive fish species):**

The Revised EA and corresponding documents (including the Updated BA/BE report) evaluated the proposed project's environmental resource impacts that were reasonably foreseeable. PacifiCorp is not proposing to discharge the mine water directly to the receiving drainages of Huntington Creek. Plans required of the construction contractors will include SWPPP and SPCC plans designed to prevent spills or sediment from entering waterways. Because impacts to sensitive fish species were not reasonably foreseeable, the Agencies were not required to evaluate them.